
CAPITAL IMPROVEMENT PLAN - EXECUTIVE SUMMARY

The Capital Improvement Plan (CIP) presents Tigard's budget and planned schedule for improvements to city owned and operated public infrastructure over a six-year period. The city allocates funding for construction activities in six defined capital improvement categories: Streets, Parks, Water, Sanitary Sewer, Stormwater, and Facilities.

A CIP project is any project that improves or adds value to the city's infrastructure, costs \$50,000 or more, and has a useful life or extends the useful life of infrastructure for five years or more. Projects are selected for funding based on priorities established in adopted system master plans and values from the city Strategic Plan as well as input from staff, residents, city committees, and city council. Priority projects are matched to available funding to identify those that can be budgeted over the six-year Capital Improvement Plan timeline. In addition, staff capacity is considered when building the CIP.

Total cost for the FY 2022-27 CIP is estimated to be \$364 million over the next six years. Spending for the city's CIP in fiscal year 2022 is projected at \$82 million across all capital funds. Below are some key projects with work budgeted for fiscal year 2022:

Streets

- 121st Avenue Sidewalks and Bike Lanes (County Major Streets Transportation Improvement Program (MSTIP) funding): Complete design, start construction.
- Frewing Street Sidewalk Infill (Community Development Block Grant): Construction.
- Transportation System Plan: Complete update.
- Greenburg Road, Tiedeman Avenue, and North Dakota Street Study for future complete streets and improved connectivity.
- North Dakota Street bridge over Fanno Creek (ODOT grant): Design.
- Tigard Street bridge over Fanno Creek: Design.
- Main Street Green Street Phase II: Construction.
- Pavement Management Program: Annual paving, slurry seal, and curb ramps work.
- Roy Rogers Road widening project (Washington County): County complete construction, financial contribution of city share.
- Americans with Disabilities Act Right-of-Way Program: Annual program to remove ADA barriers, primarily upgrading ramps in priority areas.
- Murdock Street Sidewalk and Stormwater Improvements: Design.
- 72nd Avenue: Preliminary design for improvements, Dartmouth to Pacific Highway.

Parks

- Universal Plaza: Start construction.
- Parks Major Maintenance Program: Continue addressing backlog work needs including replacement or improvement of trails, playground equipment, irrigation systems, and signage.
- Dirksen Nature Park Community Trail, Off-Street Parking Lot, and Wetland Boardwalk and Walkway: Design and construction.
- Fanno Creek Trail Connection (Regional Flexible Funds grant): Start construction.
- Park Land Acquisition: Two line items with funding for opportunistic purchases of park land in Tigard Triangle and River Terrace.
- Steve Street Park and Trail: Design.
- Cook Park Accessible Boat Ramp: Design.
- Cook Park Inclusive Play Structure: Design and construct.
- Complete plans for: Trails System (citywide), Red Rock Creek Trail alignment, Lasich Park property

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Water

- Fifth Pump at the River Intake Pump Station: Complete installation via the Lake Oswego/Tigard Water Partnership.
- Aquifer Storage and Recovery Well #2 and Well #3: Construct rehabilitation and upgrades.
- Cach Reservoir and Pump Station: Design and start construction.
- Fonner Street/121st Avenue Valve and Piping Improvements: Complete design.
- Abandon Baylor Reservoirs 9-1 and 9-2 and Hunziker Pump Station 11.
- Pipeline Renewal and Replacement Program: Initiate new program to upgrade aging system.

Sanitary Sewer and Stormwater

- Kruger Creek Stabilization: Design and start construction.
- Washington Square Area Retrofit Plan: Prepare plan for stormwater management.
- Red Rock Creek Stabilization and Enhancement: Start design.
- Stormwater, Water Quality Facility, and Sanitary Sewer Major Maintenance Programs: Continue identifying and addressing critical system repair and upgrade needs.

Below is a table summarizing the fiscal year 2022 Capital Improvement Plan (CIP). The table breaks down the CIP by system. The second column provides the capital project budgets for each system. The third column includes the system infrastructure budget. The system infrastructure budget accounts for engineering staff time related to new/unidentified capital projects and support to Public Works operations and Community Development Department planning efforts that influence public infrastructure.

System	Capital Improvement Budget	System Infrastructure	Total
Streets	\$ 16,109,500	\$ 325,800	\$ 16,435,300
Parks	\$ 13,686,945	\$ 44,200	\$ 13,731,145
Water	\$ 15,115,000	\$ 104,900	\$ 15,219,900
Sanitary Sewer	\$ 100,000	\$ 16,600	\$ 116,600
Stormwater	\$ 4,777,500	\$ 60,700	\$ 4,838,200
Facilities	\$ 32,648,270	\$ -	\$ 32,648,270
Total	\$ 82,437,215	\$ 552,200	\$ 82,989,415

PRIORITIZATION AND DEVELOPMENT OF THE CIP

Development of the Capital Improvement Plan (CIP) occurs typically over the first two quarters of each fiscal year, as input to the annual city budgeting process. The sources for potential projects include lists of unfunded projects in the prior CIP document, master plans, staff-identified needs, and citizen and City Council suggestions during planning processes.

Projects in the prior CIP that are currently underway but not yet complete are assumed to continue to move forward and do not need to be prioritized.

Potential projects are identified from the sources identified above and confirmed through internal staff meetings, citizen advisory committees, City Council, and the Budget Committee. Citizen input is also taken at Budget Committee hearings prior to the committee making its recommendations to City Council for final budget adoption. Priority projects are those that are already identified as such in adopted master plans whenever available and possible. Priority projects should match Strategic Plan goal(s), solve existing system operations and maintenance issues, create needed infrastructure to serve new or existing customer demand, and provide durable, sustainable systems. All projects shown in the six-year CIP represent high priorities, an expectation that funding is or likely will be available, and the expectation that staff project management and delivery capability exists. Funding sources include city fees, taxes and charges, as well as grants and other partner organization contributions. Funding availability assumptions are based on projected revenues and rates and the known or projected likelihood of acquiring outside grants and contributions. Projects listed for fiscal year 2022 have the most secure funding, with outer years having a somewhat lesser level of funding assurance. (Note: In the tables that follow, when the Total Project Cost is listed as "Program", this refers to projects that are ongoing programmatic capital outlays for which dollars are allocated annually.)

Grants and partnership efforts are important. When combining the available resources of Tigard and our partners, the city is able to address high-priority infrastructure needs that it cannot fund on its own. The city maintains lists of unfunded and prioritized projects that can be selected as opportunities arise for new types or new rounds of grants in the future.

The following pages show the CIP by system. Unfunded projects, shown in the tables at the end of each system, are listed in priority order; however, when the decision is made to move a project into the six-year CIP, it may not be the highest-priority project that is selected. Factors such as safety, opportunity, and funding availability (including potential grant cycles) factor into project selection.

STREETS PROJECTS

Potential street improvement projects and some larger trail development projects are first culled from existing adopted plans including the Transportation System Plan (TSP) and the Trail System Master Plan. A "qualified list" of such transportation-related projects was created and is updated generally every other year using city Strategic Plan goals, likelihood of funding availability and safety issues as filtering criteria. Safety projects were automatically given a high priority, as were projects and programs already underway. The Tigard Transportation Advisory Committee (TTAC) provides input on remaining filtered projects when the qualified list is updated. Note: The citywide Transportation System Plan update will be complete in early fiscal year 2022 and will provide key input to updating the Qualified List and project priorities for future years' CIP development.

PRIORITIZATION AND DEVELOPMENT OF THE CIP

Key: Current/Fully Funded Current/Partially Funded New Closed FY 2020-21 Unfunded

Project Number	Project Name	Funding Source	Total Project Cost
18CIP-10	79th Avenue (Bonita Road to Durham Road)	Gas Tax, City Gas Tax	2,900,000
95001	Pavement Management Program (PMP)	Street Maintenance Fee	Program
95027	Pedestrian and Cyclist Connections Program	Gas Tax	Program
95038	Tiedeman Avenue - Partial Street Improvement (RR Tracks to Greenburg)	Transportation Development Tax	935,000
95041	Upper Boones Ferry Road / Durham Road Adaptive Signal Coordination	Gas Tax, Transportation Development Tax, Transportation SDC, FSTP Grant	1,050,000
95048	Roy Rogers Road	Transportation Development Tax, MSTIP	27,000,000
95050	121st Avenue (Whistlers Lane to Tippitt) Sidewalks and Bike Lanes	Transportation Development Tax, Underground Utility, Sanitary Sewer, MSTIP	4,500,000
95054	Hall Boulevard / Pfaffle Street New Traffic Signal	Transportation Development Tax, Transportation SDC	1,330,000
95056	North Dakota Street (Fanno Creek) Bridge Replacement	City Gas Tax, Transportation SDC, STIP	6,177,000
95060	Tigard Street (Fanno Creek) Bridge Replacement	Gas Tax, City Gas Tax, Transportation SDC, Stormwater	5,415,000
95063	Transportation System Plan Update	Gas Tax, Transportation SDC	328,000
95064	Frewing Street Sidewalk Infill - CDBG	Gas Tax, Transportation SDC, CDBG Grant	799,000
95065	Pacific Highway Street Lights	Gas Tax, State Fund Local Projects	1,142,000
95066	Americans with Disabilities Act Right-of-Way Program	Transportation SDC	Program
95067	Traffic and Transportation System Major Maintenance Program	Gas Tax	Program
95068	Fiber Communication Networks Program	Transportation SDC	Program
95069	Bonita / Sequoia Intersection - Traffic Signal	Transportation Development Tax, MSTIP	670,000
95070	Greenburg Road, Tiedeman Avenue, and North Dakota Street Study	City Gas Tax, Transportation Development Tax	690,000
95071	Murdock St. Sidewalk and Stormwater Improvements	City Gas Tax, Stormwater	2,431,000
95072	72nd Avenue Pre-Design	Transportation Development Tax	520,000
95074	McDonald Street (Hall Boulevard to Pacific Highway)	Transportation Development Tax, Underground Utility, Transportation SDC, Water	23,665,000
97017	Main Street Green Street Retrofit (Phase 2)	Gas Tax, City Gas Tax, Water Quality/Quantity, TriMet, Urban Renewal	4,437,000

PRIORITIZATION AND DEVELOPMENT OF THE CIP

Project Number	Project Name	Funding Source	Total Project Cost
95073	SRTS Locust Street Sidewalks	SRTS – ODOT Grant, MSTIP	1,032,000
95042	Commercial Street Sidewalk (Main to Lincoln) - TriMet	Gas Tax, City Gas Tax, Stormwater, TriMet	2,000,000
95061	Wall Street / Tech Center Drive Connection	State Appropriation, RFFA	2,169,033
Unfunded Projects		Potential Outside Funding Source	
Greenburg Road/Tiedeman Avenue/North Dakota Sub-Area Transportation Improvements		MSTIP, TDT, Grant	
Bull Mountain Complete Street (Pacific Highway to Benchview Terrace)		MSTIP, TDT	
North Dakota Street Sidewalk (Gallo to 121st Avenue)		TDT, Grant	
Hunziker Street (72nd Avenue to 77th Avenue) Sidewalk		TDT, Grant	
Atlanta Street Extension (Tigard Triangle)		Southwest Corridor, Urban Renewal	
Tigard Triangle 72nd Avenue Improvements (Recommendations from 72nd Avenue/Tigard Triangle Study)		Southwest Corridor, Urban Renewal, Development, Federal Appropriation	
Walnut Street Improvements (Tiedeman to Pacific Highway)		MSTIP	
Ped Crossing Improvement on Bull Mountain Road at Elizabeth Price Park and Alberta Rider		Safe Routes to School Grant	
121st Avenue Pedestrian Bridge at Summer Creek			
Hall Boulevard Improvements with jurisdictional transfer		STIP, OR State Legislature, Federal Appropriation	
121st Avenue (Walnut to North Dakota) Complete Street		MSTIP	
Hall/Hunziker/Scoffins Intersection Realignment		Southwest Corridor, MSTIP	
Scoffins (Hall to Ash) Sidewalk		MSTIP, Urban Renewal	
78th Avenue Sidewalk (Pfaffle to Spruce)			
72nd Avenue Complete Street with Sidewalks and Bike Lanes (Highway 217 Interchange to Durham)		MSTIP, Grant	
68th Avenue/Atlanta/Haines Intersection and Traffic Signal		MSTIP	
103rd Avenue Sidewalk (McDonald to View Terrace)			
Sattler Sidewalk Gap Completion (96th to 100th)		Safe Routes to School Grant	
100th Avenue Sidewalks from McDonald to Kable		Safe Routes to School Grant	

PARKS PROJECTS

Potential parks and trails projects were compiled by staff from the current CIP, Parks Master Plan, Trail System Master Plan and newly identified needs from staff. Projects and programs already underway or with committed funding such as grants were automatically given a high priority. The Parks and Recreation Advisory Board (PRAB), the Tigard Transportation Advisory Committee (TTAC – as related to regional trails), and an interdepartmental team of city staff have typically ranked remaining compiled projects at least every other year. Note: The updated Parks Master Plan will be completed at the end of fiscal year 2021 and will going forward provide the primary input to project priorities and ranking in budget development for fiscal year 2023 and beyond.

PRIORITIZATION AND DEVELOPMENT OF THE CIP

Project Number	Project Name	Funding Source	Total Project Cost
21CIP-07	Copper Creek/Cook Park Stream Stabilization	Parks SDC, Stormwater	901,000
92016	Dirksen Nature Park – Overall Project	Urban Forestry, Parks Bond, Parks SDC, Stormwater	4,648,000
92016-07	Dirksen Nature Park - Community Trail	Parks SDC	815,000
92016-08	Dirksen Nature Park - Off-Street Parking Lot	Parks SDC	470,000
92016-09	Dirksen Nature Park - Small Nature Play Area (Parking Area on Tigard St.)	Parks SDC	232,000
92016-13	Dirksen Nature Park - Wetland Boardwalk and Walkway	Parks SDC	680,000
92017	Tree Canopy Replacement Program	Urban Forestry	Program
92046	Fanno Creek Trail Connection (RFFA Grant)	Transportation SDC, Parks SDC, Stormwater, RFFA Grant	8,675,000
92053	Parks Major Maintenance Program	Parks Reimbursement SDC	Program
92056	Park System Master Plan Update	Parks SDC	302,000
92058	City of Tigard/Tigard-Tualatin School District Park Development Program	Parks SDC	Program
92059	Universal Plaza	Parks SDC, Urban Renewal	4,976,000
92061	Red Rock Creek Trail Implementation Plan	Parks SDC, Metro RFFA, MSTIP	380,000
92063	River Terrace Community Parks	Parks SDC	3,100,000
92064	Steve Street Park and Trail	Parks SDC, Metro Local Share	935,000
92065	Lasich Park Property Master Plan	Parks SDC, OR State Marine Board	383,000
92066	Trail System Master Plan	Parks SDC	170,000
97027	Nick Wilson Memorial Plaza	Urban Renewal	1,198,000
97028	Tigard Triangle Parks	Parks Bond, Urban Renewal	3,800,000
92067	Bagan Park	Parks SDC, Metro Local Share	1,025,000
92068	Cook Park Accessible Boat Ramp	Parks SDC, OR State Marine Board	372,000
92069	Cook Park Inclusive Play Structure	Metro Local Share	575,000
97029	Fanno Creek Trail Connection to Universal Plaza	Urban Renewal	515,000
92026	Park Land Acquisition and Development	Parks Bond, Parks SDC	2,335,000
92057	Fanno Creek Trail Amenities	Parks SDC	76,000
92062	Cook Park Softball and Baseball Infield	Transient Lodging Tax	503,000
95057	Fanno Creek Trail Alignment Study (Bonita Rd. to Tualatin River)	Transportation SDC, Metro Grant	320,000

PRIORITIZATION AND DEVELOPMENT OF THE CIP

Project Name	Potential Outside Funding Source
Red Rock Creek Trail Bridge (Railroad)	Metro Grant, Connect OR, Federal Appropriation, Other
17CIP-17 - Fanno Creek Trail Construction (Bonita to Tualatin River)	RFFA, Metro, Federal Appropriation
92057 Fanno Creek Trail Amenities	
92016-10 - Dirksen Nature Park - Multi Use Sports Field	Clean Water Services, Metro
92016-11 - Dirksen Nature Park - Site Interpretive Elements	Metro Grant
108 th Trail	Metro Grant
Pathfinder Genesis Trail	
Westside Trail - (Barrows to Bull Mountain Road)	Metro Grant
Fanno Creek Trail Crossing at Scholls Ferry Road Construction	Metro Grant
Fields at Summerlake Park	
116th Avenue (Tigard to Katherine) Trail and Bridge	
Tualatin River Trail - Kayak/Canoe Launch at Lasich Property	Metro Grant
Tualatin River Ped/Bike Bridge - 108th/Jurgens	
Tigard Street Trail (From Fanno Creek/North Dakota Street along Tiedeman to Tigard Street)	RFFA, Other

WATER PROJECTS

An updated Water Master Plan was completed and adopted in fiscal year 2021. The funded projects in the table represent master plan and staff priorities.

Project Number	Project Name	Funding Source	Total Project Cost
96008	Water Main Line Oversizing Program	Water SDC	Program
96030	Bull Mountain Road Water Pipeline	Water, Water SDC	14,543,500
96040	Cach Reservoir 18 and Pump Station	Water, Water SDC	23,487,000
96046	Red Rock Creek Waterline Relocation	Water	854,500
96048	Water Master Plan	Water, Water SDC	531,000
96049	Willamette Intake Facility Expansion	Water SDC	3,003,400
96050	Fonner Street/121st Avenue Valve and Piping Improvements	Water, Water SDC	1,538,500
96052	Fifth Pump at the River Intake Pump Station (RIPS)	Water SDC	850,000
96053	Aquifer Storage & Recovery Well #2 and Well #3	Water, Water SDC	6,490,000
96056	Water System Development Charge (SDC) Study	Water SDC	40,000
22CIP-02	Fifty-Year Water Distribution System Seismic Plan	Water	155,000
22CIP-03	Abandon Gaarde Reservoir 2	Water	91,500

PRIORITIZATION AND DEVELOPMENT OF THE CIP

Project Number	Project Name	Funding Source	Total Project Cost
22CIP-04	Pressure Zone Consolidation – Zones 560C and D	Water	556,000
22CIP-05	High Tor Reservoir 8-1 Structural Improvements	Water	1,885,000
22CIP-06	High Tor Pump Station 8 Rebuild	Water	4,275,000
22CIP-07	ASR Expansion Feasibility Study	Water	1,151,000
22CIP-08	Water Management and Conservation Plan	Water	103,000
22CIP-09	Water Master Plan	Water	285,000
22CIP-10	Abandon Canterbury Reservoirs 1-1 and 1-2 and Pump Station 1	Water	454,000
22CIP-11	Abandon Reservoir 4	Water	178,000
22CIP-12	Lake Oswego/Tigard Water Supply Expansion	Water	6,770,000
96057	Abandon Baylor Reservoirs 9-1 and 9-2 and Hunziker Pump Station 11	Water	389,000
96058	Pipeline Renewal and Replacement Program	Water	Program
96059	Water System Major Maintenance Program	Water	Program
96060	Generator Replacement at Canterbury Pump Station	Water	200,000
96024	Waterline Replacement Program	Water	Program
96031	Fire Flow Improvement Program	Water	Program
96054	Emergency Street and Water Project on Greenfield Drive	Water	775,000
96055	Risk and Resilience Assessment and Emergency Response Plan	Water	150,000
Project Name			
550 Zone Price Reservoir			
Reservoir 19			
Pressure Zone Consolidation – Zones 560D and E			
Pressure Zone Consolidation – Zones 560F and G			
Pressure Zone Consolidation – Zones 560F and 530			
Pressure Zone Consolidation – Zones 560G and H			
Pressure Zone Consolidation – Zones 560H and A			

SANITARY SEWER PROJECTS

Priorities for budgeted projects were based upon staff recommendations as well as those from the Sanitary Sewer Master Plan and the 2018 Stormwater Master Plan. In addition to the projects listed below, the list of Stormwater projects include several stream stabilization and restoration projects that will help protect exposed and vulnerable Sanitary Sewer lines and therefore, funding will come from both Sanitary Sewer and Stormwater funds.

PRIORITIZATION AND DEVELOPMENT OF THE CIP

Project Number	Project Name	Funding Source	Total Project Cost
93003	Sanitary Sewer Major Maintenance Program	Sanitary Sewer	Program
93060	Sanitary Sewer Master Plan Update	Sanitary Sewer	130,000
93057	East Fork of Derry Dell Creek (Gaarde to Fairhaven Street)	Sanitary Sewer, Stormwater	680,000
93058	Fanno Creek Sanitary Siphon Repair	Sanitary Sewer, Stormwater	413,000
93059	Downtown Sanitary Sewer Line Project	Sanitary Sewer	355,000
Project Name			
Sewer Rehabilitation Program			
Citywide Sanitary Sewer Extension Program			

STORMWATER PROJECTS

The funded projects represent master plan and staff priorities.

Project Number	Project Name	Funding Source	Total Project Cost
19CIP-06	Gaarde Street Greenway Detention and Sewer Project (SMP 310)	Sanitary Sewer, Stormwater	300,000
21CIP-17	Detention Pipe Retrofit Study and Pilot Project	Stormwater	815,000
21CIP-19	Stormwater Master Plan Update	Stormwater	300,000
94001	Storm Drainage Major Maintenance Program	Stormwater	Program
94042	Water Quality Facility Rehabilitation Program	Stormwater	Program
94046	Kruger Creek Stabilization (SMP 304 & 308)	Sanitary Sewer, Stormwater	5,680,000
94047	Washington Square Area Retrofit Plan	Stormwater	100,000
94048	Oak Street Property Acquisition	Stormwater	445,000
94049	Red Rock Creek Stabilization and Enhancement (SMP 501-504 & 506)	Sanitary Sewer, Stormwater, Urban Renewal	5,000,000
22CIP-13	Red Rock Creek Stabilization and Enhancement – Future Locations	Sanitary Sewer, Stormwater	9,000,000
93009	Fanno Creek Slope Stabilization (Arthur Court)	Sanitary Sewer, Stormwater	1,188,000
94041	Frewing Street Stormline Replacement	Stormwater	638,000
94044	Tigard Triangle Stormwater Implementation Plan/Pre-design	Stormwater	180,000
Project Name			
Derry Dell West Stream Protection			
SW 116th Avenue Property Acquisition and Floodplain Storage			
Bagan Park Stream Restoration and Water Quality Enhancement			
Hunter's Glen Pond Rehabilitation			
Oak Street Property Floodplain Restoration			

PRIORITIZATION AND DEVELOPMENT OF THE CIP

FACILITIES PROJECTS

These projects represent staff-identified priority needs for city facilities.

Project Number	Project Name	Funding Source	Total Project Cost
91021	Public Works Facility and Yard	Facilities Capital Projects, Water, Full Faith and Credit Bonds, GO Bond	53,653,930
91023	Public Works Field Staff Work Area and Breakroom	Parks Utility, Sanitary Sewer, Stormwater, Water	125,000
22CIP-14	City Facilities Consolidation – Police/City Hall Phase	Full Faith and Credit Bonds, GO Bond	111,775,000
91022	City Hall Remodel	General Fund	591,000

IMPACT OF CAPITAL IMPROVEMENT PROGRAM ON OPERATING COSTS

The completion of capital projects may have an impact on future operating and maintenance costs in the various systems. In some instances, such as the construction of a new facility, operating costs may increase. In other instances, such as replacement of old and defective waterlines, operating and maintenance costs may decrease. As the city makes decisions about which capital projects to implement, it must also evaluate the impact these projects will have on future operating and maintenance costs and determine if the city will be able to afford those costs in future years. By approving the projects in the Capital Improvement Plan (CIP), the city is making a commitment to fund future operating costs associated with the completion of these projects. The following discussion summarizes the anticipated operational impacts of the CIP projects within each capital improvement system. However, it is also important to recognize that a significant portion of new public infrastructure enters the city inventory from new development projects. These separate and additional operational impacts are not reflected in the information below.

STREETS SYSTEM

The Streets System of the Capital Improvement Plan (CIP) includes projects that address needed repairs and upgrades to city streets and bridges. The streets program includes and prioritizes multiple projects and studies addressing needs for sidewalks and bike lanes supporting the city's Strategic Plan.

Many of the Streets projects in the proposed six-year Capital Improvement Plan will have little to no impact to operation and maintenance costs. The projects that may require a small additional level of future operational impact include: 79th Avenue (Bonita to Durham), Tiedeman Avenue – Partial Street Improvement, 121st Avenue (Whistlers Lane to Tippitt) Sidewalks and Bike Lanes, North Dakota Street (Fanno Creek) Bridge Replacement, Tigard Street (Fanno Creek) Bridge Replacement, Murdock Street Sidewalk and Stormwater Improvements, Safe Routes to School (SRTS) Locust St. Sidewalks, McDonald Street, and Main Street Green Street Phase 2. In addition, there are programs such as the Pedestrian and Cyclist Connections Program, the Fiber Communication Networks Program and the Traffic and Transportation System Major Maintenance Program that may add new assets, occasionally increasing the impact to operations and maintenance. The Pavement Management Program (PMP) will provide corrective and preventative maintenance on existing city streets which should serve to optimize the operational cost of these streets.

PARKS SYSTEM

By their nature, Parks System projects will lead to an increased need for operations and maintenance – especially when new park assets are constructed. To address the impact of a number of these projects in recent years, the FY 2020-21 Adopted Budget added three additional Parks staff and related materials and equipment to the Park Maintenance division to maintain the assets created through the CIP. This increase was funded by an increase in the park and recreation fee.

The Parks division has been proactive in addressing the growing demand for park maintenance by increasing volunteerism, cleaning less frequently, deferring preventative maintenance and deferring replacements. While these actions have been helpful from an economic standpoint, it is not enough to meet the increasing demand for park maintenance. The combination of aging assets and deferred maintenance in the park system will eventually lead to a lower quality of service. This problem will be exacerbated if additional personnel are not added to address the growing workload and will be even more evident as the city becomes responsible for new assets in River Terrace, downtown, and in underserved and underdeveloped areas of the city.

IMPACT OF CAPITAL IMPROVEMENT PROGRAM ON OPERATING COSTS

Many of the Parks projects in the proposed six-year Capital Improvement Plan will require additional operation and maintenance costs. These projects include: Steve Street Park and Trail, Fanno Creek Overlook, Fanno Creek Trail Connection (RFFA Grant), City of Tigard / Tigard-Tualatin School District Park Development, Bagan Park, and Cook Park Accessible Boat Ramp and Inclusive Play Structure. Universal Plaza and Dirksen Nature Park (multiple projects) in particular will both have a significant impact on operations, maintenance, and also recreation programming.

WATER SYSTEM

The Water System in the Capital Improvement Plan (CIP) includes a variety of projects that contribute to the overall safety, capacity, and resilience of the city's water system. These projects also include major maintenance and the repair or replacement of waterlines that are aging in the city.

In Fiscal Year 2020-21, the city completed an updated Water Master Plan. The Master Plan includes a comprehensive study of the city's water source, storage, and delivery systems. It will be used to guide future water utility decisions, including capital projects, and the CIP reflects the master plan recommendations and priorities.

Water projects in the six-year CIP that will have increased operations and maintenance efforts and costs include: Cach Reservoir and Pump Station and new and recently completed projects from the Lake Oswego/Tigard Water Partnership. The CIP also includes projects to abandon or upgrade some aging reservoirs, pump stations, and pipelines, which will result in a decrease in operations and maintenance costs.

SANITARY SEWER SYSTEM

Sanity Sewer projects are responsible for maintaining the city's sewer lines in compliance with Clean Water Services and federally-mandated guidelines. The projects in the Sanitary Sewer System CIP primarily address major maintenance and replacement needs, meaning there is normally a decreased impact on operations and maintenance. Increases occur when additional piping is donated to the city through the completion of a private project or when a city project adds additional infrastructure.

There are only two Sanitary Sewer projects listed in the six-year CIP, Sanitary Sewer Major Maintenance Program and Sanitary Sewer Master Plan Update, neither of these projects will have a significant impact on operations and maintenance. However, sanitary sewer funds are also being utilized to help fund significant stream restoration projects that are listed in the Stormwater System CIP. Severe erosion problems in several creeks are impacting or threatening the integrity of sanitary sewer infrastructure. The creek restoration projects will reduce the risk of sewer line breaks, ultimately reducing the system long-term operational costs.

STORMWATER SYSTEM

The projects within the Stormwater System are designed to address erosion, water quality, flooding and pipe system problems. Like Sanitary Sewer projects, Stormwater projects are responsible for meeting Clean Water Services and federally-mandated guidelines for cleaning, upgrading, and maintaining the stormwater and public stream system infrastructure.

IMPACT OF CAPITAL IMPROVEMENT PROGRAM ON OPERATING COSTS

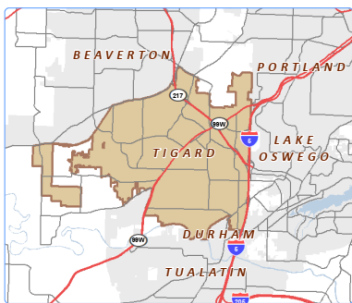
Stormwater projects in the six-year CIP that will have a minimal impact on operations and maintenance include: Kruger Creek Stabilization and Red Rock Creek Stabilization and Enhancement. While these projects may add inspection and maintenance requirements, many will significantly reduce the risk of erosion and landslides that can impact culverts and sanitary sewer lines.

FACILITIES SYSTEM

The Facilities System six-year CIP includes design and construction of significant new city facility assets. These will replace existing facilities that have significant operational and long-term upgrade needs. The implications and costs of operating and maintaining new, larger facilities versus the costs of maintaining the existing aging infrastructure will be more fully determined as the design process proceeds.



Cook Park Ball Field, Tigard



☐ Tigard City Limits



A horizontal scale bar with a black segment from 0 to 0.5 miles and a white segment from 0.5 to 1 mile. The word "Miles" is at the right end.



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CAPITAL IMPROVEMENT PLAN - STREETS

Project No.	Project Name	YTD 2021	2022	2023	2024	2025	2026	2027	Projected Total
18CIP-10	79th Avenue (Bonita Road to Durham Road)	0	0	20,000	380,000	2,500,000	0	0	2,900,000
95001	Pavement Management Program (PMP)	2,740,000	2,840,000	2,940,000	3,040,000	3,140,000	3,140,000	3,140,000	20,980,000
95027	Pedestrian and Cyclist Connections Program	430,000	300,000	300,000	300,000	300,000	300,000	300,000	2,230,000
95038	Tiedeman Avenue - Partial Street Improvement (RR Tracks to Greenburg)	0	0	168,500	747,500	0	0	0	916,000
95041	Upper Boones Ferry Road / Durham Road Adaptive Signal Coordination	25,000	70,500	0	0	0	0	0	95,500
95048	Roy Rogers Road	940,000	920,000	910,000	900,000	900,000	900,000	900,000	6,370,000
95050	121st Avenue (Whistlers Lane to Tippitt) Sidewalks and Bike Lanes	82,000	77,000	155,000	0	0	0	0	314,000
95054	Hall Boulevard / Pfaffle Street New Traffic Signal	70,000	0	0	0	150,000	370,000	740,000	1,330,000
95056	North Dakota Street (Fanno Creek) Bridge Replacement	582,000	2,076,000	40,000	20,000	0	0	0	2,718,000
95060	Tigard Street (Fanno Creek) Bridge Replacement	405,000	3,221,000	1,785,000	0	0	0	0	5,411,000
95063	Transportation System Plan Update	235,000	57,500	0	0	0	0	0	292,500
95064	Frewing Street Sidewalk Infill - CDBG	153,500	607,500	0	0	0	0	0	761,000
95065	Pacific Highway Street Lights	338,000	795,000	0	0	0	0	0	1,133,000
95066	Americans with Disabilities Act Right-of-Way Program	400,000	400,000	400,000	400,000	400,000	400,000	400,000	2,800,000
95067	Traffic and Transportation System Major Maintenance Program	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
95068	Fiber Communication Networks Program	50,000	50,000	50,000	50,000	50,000	50,000	50,000	350,000
95069	Bonita / Sequoia Intersection - Traffic Signal	0	20,000	150,000	0	0	0	0	170,000
95070	Greenburg Road, Tiedeman Avenue, and North Dakota Street Study	0	690,000	0	0	0	0	0	690,000
95071	Murdock Street Sidewalk and Stormwater Improvements	0	635,000	1,796,000	0	0	0	0	2,431,000
95072	72nd Avenue Pre-Design	0	520,000	0	0	0	0	0	520,000
95073	SRTS Locust St. Sidewalks	0	5,000	355,000	672,000	0	0	0	1,032,000
95074	McDonald Street (Hall Boulevard to Pacific Highway)	0	25,000	2,428,000	2,364,000	9,878,000	8,970,000	0	23,665,000
97017	Main Street Green Street Retrofit (Phase 2)	365,000	2,700,000	1,145,000	0	0	0	0	4,210,000
Total Funded		6,915,500	16,109,500	12,742,500	8,973,500	17,418,000	14,230,000	5,630,000	82,019,000

CAPITAL IMPROVEMENT PLAN - STREETS

18CIP-10 - 79th Avenue (Bonita Road to Durham Road)

Project Need: Portions of pavement are about 20-feet wide. Pedestrians, including school children, typically have to walk in the travel lane in these sections. This street connects to Durham Elementary School.

Project Description: Context-sensitive design to fill in sidewalk gaps and facilitate bicycling along 79th Avenue from Bonita Road to Durham Road so pedestrians will no longer be forced to share the roadway in the vehicle travel lane. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Operations and Maintenance Impact: Small impact for additional curbed street to sweep.

Total Project Cost: \$2,900,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	20,000	45,000	50,000	0	0	115,000
Total Internal	0	0	0	20,000	45,000	50,000	0	0	115,000
External Expenses									
Design and Engineering	0	0	0	0	280,000	100,000	0	0	380,000
Construction	0	0	0	0	0	1,950,000	0	0	1,950,000
Contingency	0	0	0	0	55,000	400,000	0	0	455,000
Total External	0	0	0	0	335,000	2,450,000	0	0	2,785,000
Total Project Expense	0	0	0	20,000	380,000	2,500,000	0	0	2,900,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	0	0	20,000	350,000	1,500,000	0	0	1,870,000
205-City Gas Tax Fund	0	0	0	0	30,000	1,000,000	0	0	1,030,000
Total Revenue Funding	0	0	0	20,000	380,000	2,500,000	0	0	2,900,000
Total Revenues	0	0	0	20,000	380,000	2,500,000	0	0	2,900,000

CAPITAL IMPROVEMENT PLAN - STREETS

95001 - Pavement Management Program (PMP)

Project Need: This project is a continuation of the annual program to preserve or replace portions of one of the city's most valuable resources - its streets and roadways.

Project Description: This project, funded by the Street Maintenance Fee, provides for the preservation or replacement of the asphaltic concrete by overlays, crack sealing, or slurry sealing. Streets maintenance treatments are determined based on traffic volume, pavement condition, opportunities to combine with other projects, and other factors in order to maximize the utilization of the funding available. This results in rehabilitation and preventive maintenance on about 15 miles of streets each year to extend the usable service life of the pavement. This program also annually upgrades some curb ramps to current Americans with Disabilities Act (ADA) standards when they are impacted by the overlay projects.

Operations and Maintenance Impact: This program ultimately will reduce needed maintenance and repairs of streets by keeping them at an optimal condition.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total Internal	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
External Expenses									
Construction	0	2,640,000	2,740,000	2,840,000	2,940,000	3,040,000	3,040,000	3,040,000	20,280,000
Total External	0	2,640,000	2,740,000	2,840,000	2,940,000	3,040,000	3,040,000	3,040,000	20,280,000
Total Project Expense	0	2,740,000	2,840,000	2,940,000	3,040,000	3,140,000	3,140,000	3,140,000	20,980,000
REVENUES									
Revenue Funding Source									
412-Street Maintenance Fund	0	2,740,000	2,840,000	2,940,000	3,040,000	3,140,000	3,140,000	3,140,000	20,980,000
Total Revenue Funding	0	2,740,000	2,840,000	2,940,000	3,040,000	3,140,000	3,140,000	3,140,000	20,980,000
Total Revenues	0	2,740,000	2,840,000	2,940,000	3,040,000	3,140,000	3,140,000	3,140,000	20,980,000

CAPITAL IMPROVEMENT PLAN - STREETS

95027 - Pedestrian and Cyclist Connections Program

Project Need: Missing sections of sidewalks and bike lanes and difficult crossings are located citywide.

Project Description: Projects may include sidewalk/bike lane/pathway construction, crosswalk treatments and minor intersection modifications. Projects will typically cost less than \$50,000. Funds from this program can also be used to cover matching funds for eligible grant projects benefitting pedestrians and cyclists. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Operations and Maintenance Impact: Minor increased maintenance for small increases in pavement, pedestrian crossings, and sidewalks.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	40,000	40,000	40,000	40,000	40,000	40,000	40,000	280,000
Total Internal	0	40,000	40,000	40,000	40,000	40,000	40,000	40,000	280,000
External Expenses									
Design and Engineering	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	350,000
Construction	0	340,000	210,000	210,000	210,000	210,000	210,000	210,000	1,600,000
Total External	0	390,000	260,000	260,000	260,000	260,000	260,000	260,000	1,950,000
Total Project Expense	0	430,000	300,000	300,000	300,000	300,000	300,000	300,000	2,230,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	430,000	300,000	300,000	300,000	300,000	300,000	300,000	2,230,000
Total Revenue Funding	0	430,000	300,000	300,000	300,000	300,000	300,000	300,000	2,230,000
Total Revenues	0	430,000	300,000	300,000	300,000	300,000	300,000	300,000	2,230,000

CAPITAL IMPROVEMENT PLAN - STREETS

95038 - Tiedeman Avenue - Partial Street Improvement (RR Tracks to Greenburg)

Project Need: There is currently a lack of sidewalks, bike lanes, and storm drainage facilities along Tiedeman Avenue from the railroad tracks north of Tigard Street to Greenburg Road.

Project Description: Build a sidewalk, bike lane, and associated stormwater infrastructure to treat stormwater runoff. The project will connect to the Tigard Street Heritage multi-use pathway and complete pedestrian and bicycle improvements to Greenburg Road north of the rail crossing. Pedestrians and cyclists will no longer be forced to share the roadway in the vehicle travel lane. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Operations and Maintenance Impact: Increased cost for maintenance of additional pavement, stormwater facility, sidewalks and striping, and additional curbed street to sweep.

Total Project Cost: \$935,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	7,500	0	0	29,500	57,500	0	0	0	94,500
Total Internal	7,500	0	0	29,500	57,500	0	0	0	94,500
External Expenses									
Land/Right of Way Acquisition	0	0	0	20,000	200,000	0	0	0	220,000
Design and Engineering	11,500	0	0	100,000	45,000	0	0	0	156,500
Construction	0	0	0	0	360,000	0	0	0	360,000
Contingency	0	0	0	19,000	85,000	0	0	0	104,000
Total External	11,500	0	0	139,000	690,000	0	0	0	840,500
Total Project Expense	19,000	0	0	168,500	747,500	0	0	0	935,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	19,000	0	0	168,500	747,500	0	0	0	935,000
Total Revenue Funding	19,000	0	0	168,500	747,500	0	0	0	935,000
Total Revenues	19,000	0	0	168,500	747,500	0	0	0	935,000

CAPITAL IMPROVEMENT PLAN - STREETS

95041 - Upper Boones Ferry Road / Durham Road Adaptive Signal Coordination

Project Need: Address morning, evening and weekend traffic congestion.

Project Description: With thirteen traffic signals and two rail crossings, signal coordination could significantly increase vehicular flow and could possibly reduce crash rates. The various types of traffic users (residential, school, major city park, office and retail) make this corridor a particularly good candidate for adaptive signal coordination. This project will install traffic signal coordination that extends along Durham Road, from Boones Ferry Road to 92nd Avenue and connects the Durham/Summerfield signal to the Durham/Pacific Highway signal. Signals will operate based on specific vehicular demands rather than on fixed timing programs. If successful, other heavily congested corridors could be similarly equipped.

Project Funding: The project is primarily funded by a Federal Surface Transportation Program Grant administered by the Oregon Department of Transportation and managed by Washington County.

Operations and Maintenance Impact: Minimal to none.

Total Project Cost: \$1,050,000

City of Tigard Project Cost: \$248,500 (Tigard's match for construction was advanced to ODOT in FY 2015-16)

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	29,000	5,000	5,000	0	0	0	0	0	39,000
Total Internal	29,000	5,000	5,000	0	0	0	0	0	39,000
External Expenses									
Design and Engineering	0	20,000	0	0	0	0	0	0	20,000
Construction	124,000	0	65,500	0	0	0	0	0	189,500
Total External	124,000	20,000	65,500	0	0	0	0	0	209,500
Total Project Expense	153,000	25,000	70,500	0	0	0	0	0	248,500
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	2,000	0	0	0	0	0	0	0	2,000
405-Transportation Development Tax	151,000	12,500	35,250	0	0	0	0	0	198,750
415-Transportation SDC Fund	0	12,500	35,250	0	0	0	0	0	47,750
Total Revenue Funding	153,000	25,000	70,500	0	0	0	0	0	248,500
Total Revenues	153,000	25,000	70,500	0	0	0	0	0	248,500

CAPITAL IMPROVEMENT PLAN - STREETS

95048 - Roy Rogers Road

Project Need: Increased traffic due to River Terrace, South Cooper Mountain, and other area development is driving the need for increased capacity on Roy Rogers Road.

Project Description: The Roy Rogers Road improvement project includes four vehicle travel lanes from Bull Mountain Road to Scholls Ferry Road, turn lanes as appropriate, pedestrian and bicycle facilities, intersection improvements at the Bull Mountain Road and Scholls Ferry Road intersections and improvements to address connectivity at two additional intersections on Roy Rogers Road between Scholls Ferry Road and Bull Mountain Road, including the Lorenzo Lane/Jean Louise Road intersection.

Project Funding: Washington County is managing the project and providing two-thirds of the total costs through Major Streets Transportation Improvement Program (MSTIP bonding cost-sharing) funding. The city will provide one-third of the total cost funding share over ten years.

Operations and Maintenance Impact: Significant increase in right-of-way landscaping and stormwater facilities to maintain (county will maintain pavement).

Total Project Cost: \$27,000,000

City of Tigard Project Cost: \$9,175,000 (includes costs beyond FY 2026-27)

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	102,500	40,000	20,000	10,000	0	0	0	0	172,500
Total Internal	102,500	40,000	20,000	10,000	0	0	0	0	172,500
External Expenses									
Construction	901,500	900,000	900,000	900,000	900,000	900,000	900,000	900,000	7,201,500
Total External	901,500	900,000	900,000	900,000	900,000	900,000	900,000	900,000	7,201,500
Total Project Expense	1,004,000	940,000	920,000	910,000	900,000	900,000	900,000	900,000	7,374,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	1,004,000	940,000	920,000	910,000	900,000	900,000	900,000	900,000	7,374,000
Total Revenue Funding	1,004,000	940,000	920,000	910,000	900,000	900,000	900,000	900,000	7,374,000
Total Revenues	1,004,000	940,000	920,000	910,000	900,000	900,000	900,000	900,000	7,374,000

CAPITAL IMPROVEMENT PLAN - STREETS

95050 - 121st Avenue (Whistlers Lane to Tippitt) Sidewalks and Bike Lanes

Project Need: 121st Avenue is a busy, narrow roadway with no place to walk or bike outside the travel lane. This route would otherwise be used by many people to get to and from their neighborhoods. This project is the top priority project for the Tigard Transportation Advisory Committee (TTAC).

Project Description: Construct sidewalks, bike lanes, streetlights, and enhanced pedestrian crossings. This will complete the sidewalks and bike lanes from Walnut Street to Gaarde Street. Anticipated to be a context-sensitive design to minimize community impact, with two lanes (no center turn lane). This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Project Funding: Washington County is managing and providing the majority of the funding for this project under the County Major Streets Transportation Improvement Program (MSTIP).

Operations and Maintenance Impact: Increased cost for maintenance of additional pavement, stormwater facilities, striping, and additional curbed street to sweep.

Total Project Cost: \$4,500,000

City of Tigard Project Cost: \$404,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	87,000	50,000	50,000	50,000	0	0	0	0	237,000
Total Internal	87,000	50,000	50,000	50,000	0	0	0	0	237,000
External Expenses									
Design and Engineering	3,000	7,000	5,000	5,000	0	0	0	0	20,000
Construction	0	0	0	15,000	0	0	0	0	15,000
Contingency	0	25,000	22,000	85,000	0	0	0	0	132,000
Total External	3,000	32,000	27,000	105,000	0	0	0	0	167,000
Total Project Expense	90,000	82,000	77,000	155,000	0	0	0	0	404,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	90,000	65,000	57,000	119,000	0	0	0	0	331,000
411-Underground Utility Fund	0	10,000	20,000	20,000	0	0	0	0	50,000
500-Sanitary Sewer Fund	0	7,000	0	16,000	0	0	0	0	23,000
Total Revenue Funding	90,000	82,000	77,000	155,000	0	0	0	0	404,000
Total Revenues	90,000	82,000	77,000	155,000	0	0	0	0	404,000

CAPITAL IMPROVEMENT PLAN - STREETS

95054 - Hall Boulevard / Pfaffle Street New Traffic Signal

Project Need: Currently drivers can experience difficulty pulling out from Pfaffle Street onto Hall Boulevard especially during the morning and evening commute hours. Congestion has increased with recent development in the area and Hall Boulevard is difficult for pedestrians to cross.

Project Description: This project will construct a new traffic signal with appropriate illumination, crosswalks, and lengthening and separation of the turn lanes on Pfaffle Street. The project will be complicated by the proximity to the Hall Boulevard/Highway 217 Bridge and the fact that Hall Boulevard is an ODOT-controlled facility necessitating agency approval and permits. Completion of these improvements will increase safety for vehicles, pedestrians, and cyclists using the intersection or traveling to and from the nearby school, Pacific Highway, and Washington Square Regional Center. In FY 2020-21, Tigard will pay ODOT to design and construct a traffic signal footing along with conduit for future fiber optic cable installation. This project is within the limits of the Hall Boulevard overpass replacement that is part of ODOT's OR 217 (OR-10 to OR-99W) project.

Operations and Maintenance Impact: Minor increase in funding to county for signal maintenance.

Total Project Cost: \$1,330,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	3,500	0	0	0	30,000	20,000	20,000	73,500
Total Internal	0	3,500	0	0	0	30,000	20,000	20,000	73,500
External Expenses									
Design and Engineering	0	21,500	0	0	0	100,000	30,000	30,000	181,500
Construction	0	40,000	0	0	0	0	290,000	600,000	930,000
Contingency	0	5,000	0	0	0	20,000	30,000	90,000	145,000
Total External	0	66,500	0	0	0	120,000	350,000	720,000	1,256,500
Total Project Expense	0	70,000	0	0	0	150,000	370,000	740,000	1,330,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	0	0	0	0	0	150,000	370,000	740,000	1,260,000
415-Transportation SDC Fund	0	70,000	0	0	0	0	0	0	70,000
Total Revenue Funding	0	70,000	0	0	0	150,000	370,000	740,000	1,330,000
Total Revenues	0	70,000	0	0	0	150,000	370,000	740,000	1,330,000

CAPITAL IMPROVEMENT PLAN - STREETS

95056 - North Dakota Street (Fanno Creek) Bridge Replacement

Project Need: The bridge structure has deteriorated and needs to be replaced. There is a lack of bike lanes on the bridge and a wooden walkway on only one side.

Project Description: This project will replace the existing bridge with a new bridge wide enough to accommodate pedestrians and cyclists (on both sides) along with vehicles. Environmental regulations will require a new bridge to be significantly higher and longer than the current bridge. The project may also reduce flooding over the roadway.

Project Funding: The project was selected as part of the Local Bridge Program and includes \$3,514,679 of federal funds. The project will be delivered by the Oregon Department of Transportation.

Operations and Maintenance Impact: Increased pavement area and striping maintenance, reduced bridge maintenance.

Total Project Cost: \$6,177,000

City of Tigard Project Cost: \$2,662,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	58,000	40,000	80,000	40,000	20,000	0	0	0	238,000
Total Internal	58,000	40,000	80,000	40,000	20,000	0	0	0	238,000
External Expenses									
Land/Right of Way Acquisition	0	0	270,000	0	0	0	0	0	270,000
Design and Engineering	111,000	532,000	30,000	0	0	0	0	0	673,000
Construction	0	0	1,160,000	0	0	0	0	0	1,160,000
Environmental Permit Compliance	0	0	36,000	0	0	0	0	0	36,000
Contingency	0	10,000	500,000	0	0	0	0	0	510,000
Total External	111,000	542,000	1,996,000	0	0	0	0	0	2,649,000
Total Project Expense	169,000	582,000	2,076,000	40,000	20,000	0	0	0	2,887,000
REVENUES									
Revenue Funding Source									
205-City Gas Tax Fund	169,000	0	0	0	0	0	0	0	169,000
415-Transportation SDC Fund	0	582,000	1,851,000	40,000	20,000	0	0	0	2,493,000
Total Revenue Funding	169,000	582,000	1,851,000	40,000	20,000	0	0	0	2,662,000
Other Revenue Source									
Local Bridge Program	0	0	225,000	0	0	0	0	0	225,000
Total Other Revenue	0	0	225,000	0	0	0	0	0	225,000
Total Revenues	169,000	582,000	2,076,000	40,000	20,000	0	0	0	2,887,000

CAPITAL IMPROVEMENT PLAN - STREETS

95060 - Tigard Street (Fanno Creek) Bridge Replacement

Project Need: The structure has deteriorated and needs to be replaced. There is a lack of bike lanes on the bridge and a wooden walkway only on one side.

Project Description: Replace existing Tigard Street Bridge over the Fanno Creek with a new structurally-sound bridge wide enough to accommodate pedestrians and cyclists (on both sides) along with motor vehicles. Environmental regulations will require the new bridge to be significantly higher and longer than the current bridge, which may necessitate some rework of the existing Fanno Creek Trail just west of the bridge. The creek greenway will be excavated to construct a large floodplain detention pond to mitigate the bridge project, which will store water during storms. This is part of project 403 in the Stormwater Master Plan. The schedule of this project was moved up to start in fiscal year 2020-21 so the city can be prepared to have construction occur in a time frame that best coordinates with ODOT's Highway 217 widening project that impacts Hall Boulevard.

Operations and Maintenance Impact: Increased pavement area and striping maintenance, reduced bridge maintenance.

Total Project Cost: \$5,415,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	4,000	55,000	95,000	90,000	0	0	0	0	244,000
Total Internal	4,000	55,000	95,000	90,000	0	0	0	0	244,000
External Expenses									
Land/Right of Way Acquisition	0	0	480,000	0	0	0	0	0	480,000
Design and Engineering	0	350,000	785,000	20,000	0	0	0	0	1,155,000
Construction	0	0	1,575,000	1,475,000	0	0	0	0	3,050,000
Environmental Permit Compliance	0	0	36,000	0	0	0	0	0	36,000
Contingency	0	0	250,000	200,000	0	0	0	0	450,000
Total External	0	350,000	3,126,000	1,695,000	0	0	0	0	5,171,000
Total Project Expense	4,000	405,000	3,221,000	1,785,000	0	0	0	0	5,415,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	4,000	0	1,506,000	675,000	0	0	0	0	2,185,000
205-City Gas Tax Fund	0	0	0	500,000	0	0	0	0	500,000
415-Transportation SDC Fund	0	405,000	1,590,000	485,000	0	0	0	0	2,480,000
510-Stormwater Fund	0	0	125,000	125,000	0	0	0	0	250,000
Total Revenue Funding	4,000	405,000	3,221,000	1,785,000	0	0	0	0	5,415,000
Total Revenues	4,000	405,000	3,221,000	1,785,000	0	0	0	0	5,415,000

CAPITAL IMPROVEMENT PLAN - STREETS

95063 - Transportation System Plan Update

Project Need: Tigard is required by state administrative rule to have a current transportation plan, which is typically updated every five years. The most recent transportation plan update was prepared in 2008-09.

Project Description: Conduct appropriate community, traffic, and multi-modal transportation analysis. Prepare a draft plan, hold public meetings and hearings, and obtain city council adoption of the final plan.

Operations and Maintenance Impact: None.

Total Project Cost: \$328,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	4,500	35,000	10,000	0	0	0	0	0	49,500
Total Internal	4,500	35,000	10,000	0	0	0	0	0	49,500
External Expenses									
Design and Engineering	31,000	200,000	47,500	0	0	0	0	0	278,500
Total External	31,000	200,000	47,500	0	0	0	0	0	278,500
Total Project Expense	35,500	235,000	57,500	0	0	0	0	0	328,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	35,500	0	0	0	0	0	0	0	35,500
415-Transportation SDC Fund	0	235,000	57,500	0	0	0	0	0	292,500
Total Revenue Funding	35,500	235,000	57,500	0	0	0	0	0	328,000
Total Revenues	35,500	235,000	57,500	0	0	0	0	0	328,000

CAPITAL IMPROVEMENT PLAN - STREETS

95064 - Frewing Street Sidewalk Infill - CDBG

Project Need: Currently, pedestrians living adjacent to Frewing Street are forced to walk in the roadway.

Project Description: Construct sidewalks, curbs, Americans with Disabilities Act (ADA) curb ramps, and drainage improvements on Frewing Street between Pacific Highway and Ash Avenue. Storm drainage work includes providing inlets to collect street runoff. The project will result in improved northbound pedestrian access to shopping areas and bus stops on Pacific Highway and southbound access to the Tigard Civic Center and the Public Library. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Project Funding: This project is partially funded by a \$425,604 Community Development Block Grant.

Operations and Maintenance Impact: None (or minor) for new sidewalk and additional curbed street to sweep.

Total Project Cost: \$799,000

City of Tigard Project Cost: \$438,396

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	20,000	40,000	20,000	0	0	0	0	0	80,000
Total Internal	20,000	40,000	20,000	0	0	0	0	0	80,000
External Expenses									
Land/Right of Way Acquisition	0	20,000	0	0	0	0	0	0	20,000
Design and Engineering	18,000	93,500	20,000	0	0	0	0	0	131,500
Construction	0	0	485,500	0	0	0	0	0	485,500
Environmental Permit Compliance	0	0	5,000	0	0	0	0	0	5,000
Contingency	0	0	77,000	0	0	0	0	0	77,000
Total External	18,000	113,500	587,500	0	0	0	0	0	719,000
Total Project Expense	38,000	153,500	607,500	0	0	0	0	0	799,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	19,975	39,500	0	0	0	0	0	0	59,475
415-Transportation SDC Fund	0	20,500	358,421	0	0	0	0	0	378,921
Total Revenue Funding	19,975	60,000	358,421	0	0	0	0	0	438,396
Other Revenue Source									
Community Development Block Grant	18,025	93,500	249,079	0	0	0	0	0	360,604
Total Other Revenue	18,025	93,500	249,079	0	0	0	0	0	360,604
Total Revenues	38,000	153,500	607,500	0	0	0	0	0	799,000

CAPITAL IMPROVEMENT PLAN - STREETS

95065 - Pacific Highway Street Lights

Project Need: Many intersections on Pacific Highway do not have sufficient lighting making it difficult to see for drivers, cyclists, pedestrians, and transit users. Pedestrians are particularly difficult to see and are vulnerable road users.

Project Description: Install streetlights at unlit quadrants of intersections where they do not already exist along Pacific Highway through the City of Tigard. Intersections include 72nd Avenue, Main Street/Johnson Street, McKenzie Street, School Street, Walnut Street, Frewing Street, Garrett Street, Park Street, Royalty Parkway, and Durham Road. Some lights will be added to existing signals and power poles, some will require new poles.

Project Funding: This project will be partially funded with a grant from ODOT using the State Fund Local Project (SFLP) program.

Operations and Maintenance Impact: Minor.

Total Project Cost: \$1,142,000

City of Tigard Project Cost: \$219,800

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	9,000	40,000	30,000	0	0	0	0	0	79,000
Total Internal	9,000	40,000	30,000	0	0	0	0	0	79,000
External Expenses									
Land/Right of Way Acquisition	0	102,000	0	0	0	0	0	0	102,000
Design and Engineering	0	196,000	52,000	0	0	0	0	0	248,000
Construction	0	0	672,000	0	0	0	0	0	672,000
Contingency	0	0	41,000	0	0	0	0	0	41,000
Total External	0	298,000	765,000	0	0	0	0	0	1,063,000
Total Project Expense	9,000	338,000	795,000	0	0	0	0	0	1,142,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	9,000	40,000	170,800	0	0	0	0	0	219,800
Total Revenue Funding	9,000	40,000	170,800	0	0	0	0	0	219,800
Other Revenue Source									
State Fund Local Projects	0	298,000	624,200	0	0	0	0	0	922,200
Total Other Revenue	0	298,000	624,200	0	0	0	0	0	922,200
Total Revenues	9,000	338,000	795,000	0	0	0	0	0	1,142,000

CAPITAL IMPROVEMENT PLAN - STREETS

95066 - Americans with Disabilities Act Right-of-Way Program

Project Need: The city must implement projects from the Americans with Disabilities Act (ADA) Transition Plan.

Project Description: Create a program to implement projects from the ADA Transition Plan to provide equal access to public facilities. This program will focus on needs in the right-of-way including curb ramps and pedestrian crossing push buttons. Projects will be prioritized based on criteria in the city's 2019 ADA Transition Plan and construction may be coordinated with the annual Pavement Management Program. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Operations and Maintenance Impact: Little to no impact.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	40,000	40,000	40,000	40,000	40,000	40,000	40,000	280,000
Total Internal	0	40,000	40,000	40,000	40,000	40,000	40,000	40,000	280,000
External Expenses									
Construction	0	360,000	360,000	360,000	360,000	360,000	360,000	360,000	2,520,000
Total External	0	360,000	360,000	360,000	360,000	360,000	360,000	360,000	2,520,000
Total Project Expense	0	400,000	400,000	400,000	400,000	400,000	400,000	400,000	2,800,000
REVENUES									
Revenue Funding Source									
415-Transportation SDC Fund	0	400,000	400,000	400,000	400,000	400,000	400,000	400,000	2,800,000
Total Revenue Funding	0	400,000	400,000	400,000	400,000	400,000	400,000	400,000	2,800,000
Total Revenues	0	400,000	400,000	400,000	400,000	400,000	400,000	400,000	2,800,000

CAPITAL IMPROVEMENT PLAN - STREETS

95067 - Traffic and Transportation System Major Maintenance Program

Project Need: The City has a large amount of deferred signal maintenance at the traffic signals it owns and operates. Many of our existing traffic signal components are outdated and replacement parts are not available. This fund will be used to upgrade deficient equipment and improve functionality of our traffic signal system.

Project Description: This project provides funding to replace traffic signal equipment that is outdated, poorly operating, or near failure. Work will include items like signal head upgrades, controller cabinets and appurtenances, functionality upgrades such as new controllers and detection for vehicles, cyclists, and pedestrians. Project scope may also include sidewalk and pavement improvements to meet ADA requirements and improve safety.

Operations and Maintenance Impact: The upgrades will reduce overall maintenance costs by increasing equipment efficiency.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	140,000
Total Internal	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	140,000
External Expenses									
Construction	0	80,000	80,000	80,000	80,000	80,000	80,000	80,000	560,000
Total External	0	80,000	80,000	80,000	80,000	80,000	80,000	80,000	560,000
Total Project Expense	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total Revenue Funding	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total Revenues	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000

CAPITAL IMPROVEMENT PLAN - STREETS

95068 - Fiber Communication Networks Program

Project Need: The project will allow the city to work towards having a fully connected traffic signal system to optimize traffic flow/efficiency. In addition, it will allow remote access for ease of trouble shooting and maintenance. Remote access will also improve response time to community member concerns. The fiber system will become an asset the city can use for collaboration with other partners to access regional systems and save Tigard from having to buy standalone software/infrastructure.

Project Description: This project will add conduit and/or fiber as an opportunity response to other planned projects to help build out the city's signal fiber network.

Operations and Maintenance Impact: Conduit and fiber network will require minimal maintenance. The city utilizes an on-call for needed repairs and maintenance.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	5,000	5,000	5,000	5,000	5,000	5,000	5,000	35,000
Total Internal	0	5,000	5,000	5,000	5,000	5,000	5,000	5,000	35,000
External Expenses									
Construction	0	45,000	45,000	45,000	45,000	45,000	45,000	45,000	315,000
Total External	0	45,000	45,000	45,000	45,000	45,000	45,000	45,000	315,000
Total Project Expense	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	350,000
REVENUES									
Revenue Funding Source									
415-Transportation SDC Fund	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	350,000
Total Revenue Funding	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	350,000
Total Revenues	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	350,000

CAPITAL IMPROVEMENT PLAN - STREETS

95069 - Bonita / Sequoia Intersection - Traffic Signal

Project Need: This is a high-priority safety project. There are traffic issues and a high crash rate at this intersection.

Project Description: Construct a traffic signal at the intersection of Bonita Road and Sequoia Parkway and add a bike lane along Bonita Road.

Project Funding: Washington County selected this project for Major Streets Transportation Improvement Program (MSTIP) and will provide most of the funding and project implementation.

Operations and Maintenance Impact: Will require increased payments to Washington County to maintain an additional signal and a slight cost increase for restriping.

Total Project Cost: \$670,000

City of Tigard Project Cost: \$170,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	20,000	40,000	0	0	0	0	60,000
Total Internal	0	0	20,000	40,000	0	0	0	0	60,000
External Expenses									
Construction	0	0	0	100,000	0	0	0	0	100,000
Contingency	0	0	0	10,000	0	0	0	0	10,000
Total External	0	0	0	110,000	0	0	0	0	110,000
Total Project Expense	0	0	20,000	150,000	0	0	0	0	170,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	0	0	20,000	150,000	0	0	0	0	170,000
Total Revenue Funding	0	0	20,000	150,000	0	0	0	0	170,000
Total Revenues	0	0	20,000	150,000	0	0	0	0	170,000

CAPITAL IMPROVEMENT PLAN - STREETS

95070 - Greenburg Road, Tiedeman Avenue, and North Dakota Street Study

Project Need: There is a high crash rate along Greenburg Road from Tiedeman Avenue up to Highway 217. Significant traffic congestion occurs, particularly during the morning rush hour. Other known issues include the lack of bike lanes on Greenburg Road and North Dakota Street between Tiedeman Avenue and the Fanno Creek Trail; narrow curb-tight sidewalk along Greenburg Road; and the lack of walking space, bike lanes, and storm drainage along Tiedeman Avenue and North Dakota Street approaching Greenburg Road.

Project Description: Study the area of Greenburg Road, Tiedeman Avenue, and North Dakota Street to increase safety and promote the complete street design concept. The study will review options for adding sidewalks, bike lanes, turn lanes, and complete storm drainage gaps. This project supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: An equitable community that is walkable, healthy, and accessible for everyone."

Project Funding: The study is shown as fully funded. Upon completion of the study, a future CIP will reflect funding for the construction phase.

Operations and Maintenance Impact: The study phase will not have an increased cost for operations and maintenance. It is anticipated the study will confirm the need for additional pavement, sidewalks, and striping which will increase cost for maintenance after construction.

Total Project Cost: \$690,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	85,000	0	0	0	0	0	85,000
Total Internal	0	0	85,000	0	0	0	0	0	85,000
External Expenses									
Design and Engineering	0	0	550,000	0	0	0	0	0	550,000
Contingency	0	0	55,000	0	0	0	0	0	55,000
Total External	0	0	605,000	0	0	0	0	0	605,000
Total Project Expense	0	0	690,000	0	0	0	0	0	690,000
REVENUES									
Revenue Funding Source									
205-City Gas Tax Fund	0	0	110,000	0	0	0	0	0	110,000
405-Transportation Development Tax	0	0	580,000	0	0	0	0	0	580,000
Total Revenue Funding	0	0	690,000	0	0	0	0	0	690,000
Total Revenues	0	0	690,000	0	0	0	0	0	690,000

CAPITAL IMPROVEMENT PLAN - STREETS

95071 - Murdock Street Sidewalk and Stormwater Improvements

Project Need: Murdock Street from 103rd Avenue to James Templeton Elementary School is currently about 22-feet wide. Pedestrians, including school children, typically have to walk in the travel lane. In addition, there is insufficient stormwater infrastructure in the area, leading to regular maintenance issues.

Project Description: This project will construct a sidewalk and minor roadway widening where required along one side of the street from 103rd Avenue to Templeton Elementary School. The project will also construct a new storm drainage system. Some additional right-of-way will be necessary and topographic and stormwater drainage issues will add complexity to the project. Upon completion, the project will provide a safer route to and from the school for this neighborhood. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Operations and Maintenance Impact: Minor decrease in maintenance cost for stormwater facilities and minor increase in maintenance cost for additional curbed street to sweep.

Total Project Cost: \$2,431,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	60,000	60,000	0	0	0	0	120,000
Total Internal	0	0	60,000	60,000	0	0	0	0	120,000
External Expenses									
Land/Right of Way Acquisition	0	0	185,000	0	0	0	0	0	185,000
Design and Engineering	0	0	340,000	115,000	0	0	0	0	455,000
Construction	0	0	0	1,286,000	0	0	0	0	1,286,000
Contingency	0	0	50,000	335,000	0	0	0	0	385,000
Total External	0	0	575,000	1,736,000	0	0	0	0	2,311,000
Total Project Expense	0	0	635,000	1,796,000	0	0	0	0	2,431,000
REVENUES									
Revenue Funding Source									
205-City Gas Tax Fund	0	0	553,000	1,577,000	0	0	0	0	2,130,000
510-Stormwater Fund	0	0	82,000	219,000	0	0	0	0	301,000
Total Revenue Funding	0	0	635,000	1,796,000	0	0	0	0	2,431,000
Total Revenues	0	0	635,000	1,796,000	0	0	0	0	2,431,000

CAPITAL IMPROVEMENT PLAN - STREETS

95072 - 72nd Avenue Pre-Design

Project Need: This project is needed to support cohesive design as development projects build half-street improvements along 72nd Avenue, and to plan for a future CIP project. As development occurs, it is imperative to have an ultimate cross section, alignment, and right-of-way requirement defined to assure as developments are approved/permitted they will support the city's vision for SW 72nd Avenue.

Project Description: The 72nd Avenue pre-design project will develop up to a 30% engineered design based on the 72nd Avenue Plan. This project will focus on the section of 72nd Avenue between Pacific Highway and Dartmouth and will establish right-of-way needs, curb lines, pavement markings, and early design considerations for the Red Rock Creek Culvert upgrade.

Operations and Maintenance Impact: None for pre-design.

Total Project Cost: \$520,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	50,000	0	0	0	0	0	50,000
Total Internal	0	0	50,000	0	0	0	0	0	50,000
External Expenses									
Design and Engineering	0	0	450,000	0	0	0	0	0	450,000
Contingency	0	0	20,000	0	0	0	0	0	20,000
Total External	0	0	470,000	0	0	0	0	0	470,000
Total Project Expense	0	0	520,000	0	0	0	0	0	520,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	0	0	520,000	0	0	0	0	0	520,000
Total Revenue Funding	0	0	520,000	0	0	0	0	0	520,000
Total Revenues	0	0	520,000	0	0	0	0	0	520,000

CAPITAL IMPROVEMENT PLAN - STREETS

95073 - SRTS Locust St. Sidewalks

Project Need: SW Locust Street, a collector roadway adjacent to Metzger Elementary School, has no sidewalk on the north side of the roadway limiting students' ability to travel along the street. There is also no marked crosswalk across SW Locust Street to SW Lincoln Street, which is the only point of access for vehicles.

Project Description: A new crosswalk with a rapid rate flashing beacon will be constructed across SW Locust Street to SW Lincoln Street. A new sidewalk (1,465 linear feet) will be constructed from SW 92nd Avenue to Hall Boulevard on the north side of Locust Street to complete the pedestrian network adjacent to the school. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Project Funding: Safe Routes to School (SRTS) grant for \$792,000 and \$240,000 from Washington County MSTIP.

Operations and Maintenance Impact: Increased cost for maintenance of new sidewalk, pavement, striping, and rapid rate flashing beacon.

Total Project Cost: \$1,032,000

City of Tigard Project Cost: \$0

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	5,000	35,000	30,000	0	0	0	70,000
Total Internal	0	0	5,000	35,000	30,000	0	0	0	70,000
External Expenses									
Land/Right of Way Acquisition	0	0	0	10,000	0	0	0	0	10,000
Design and Engineering	0	0	0	120,000	30,000	0	0	0	150,000
Construction	0	0	0	145,000	512,000	0	0	0	657,000
Contingency	0	0	0	45,000	100,000	0	0	0	145,000
Total External	0	0	0	320,000	642,000	0	0	0	962,000
Total Project Expense	0	0	5,000	355,000	672,000	0	0	0	1,032,000
REVENUES									
Other Revenue Source									
SRTS - ODOT Grant	0	0	5,000	265,000	522,000	0	0	0	792,000
Washington County MSTIP	0	0	0	90,000	150,000	0	0	0	240,000
Total Other Revenue	0	0	5,000	355,000	672,000	0	0	0	1,032,000
Total Revenues	0	0	5,000	355,000	672,000	0	0	0	1,032,000

CAPITAL IMPROVEMENT PLAN - STREETS

95074 - McDonald Street (Hall Boulevard to Pacific Highway)

Project Need: There is a lack of pedestrian and bicycle infrastructure along this busy arterial that is a key link in the transportation network. Safe crosswalk locations are lacking. Drivers must wait in busy travel lanes to find gaps to make a left turn off of McDonald Street, and the intersection with Hall Boulevard needs optimization improvements. This project has been a priority to address multi-model and safety needs for many years. Water system transmission lines are also aging and not built to current standards.

Project Description: Upgrade McDonald Street from Pacific Highway to Hall Boulevard to a complete street with full sidewalks, bike lanes, and center turn lane where appropriate for safety. The project will result in enhancements for pedestrians at crosswalks; increased safety for people walking and biking; reduced potential for crashes involving vehicles turning or waiting to turn; intersection and signal improvements at Hall Boulevard; replacement of deteriorating major waterlines in the right of way; and some undergrounding of overhead utilities. This project supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Operations and Maintenance Impact: Increased cost for maintenance of additional pavement, sidewalks and striping, and additional curbed street to sweep.

Total Project Cost: \$23,665,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	25,000	200,000	200,000	200,000	125,000	0	750,000
Total Internal	0	0	25,000	200,000	200,000	200,000	125,000	0	750,000
External Expenses									
Land/Right of Way Acquisition	0	0	0	0	1,147,000	0	0	0	1,147,000
Design and Engineering	0	0	0	1,925,000	820,000	642,000	642,000	0	4,029,000
Construction	0	0	0	0	0	7,516,000	6,859,000	0	14,375,000
Environmental Permit Compliance	0	0	0	110,000	0	0	0	0	110,000
Contingency	0	0	0	193,000	197,000	1,520,000	1,344,000	0	3,254,000
Total External	0	0	0	2,228,000	2,164,000	9,678,000	8,845,000	0	22,915,000
Total Project Expense	0	0	25,000	2,428,000	2,364,000	9,878,000	8,970,000	0	23,665,000
REVENUES									
Revenue Funding Source									
405-Transportation Development Tax	0	0	25,000	1,707,000	2,267,000	6,202,000	6,385,000	0	16,586,000
411-Underground Utility Fund	0	0	0	51,000	0	260,000	189,000	0	500,000
415-Transportation SDC Fund	0	0	0	70,000	97,000	359,000	165,000	0	691,000
530-Water Fund	0	0	0	600,000	0	3,057,000	2,231,000	0	5,888,000
Total Revenue Funding	0	0	25,000	2,428,000	2,364,000	9,878,000	8,970,000	0	23,665,000
Total Revenues	0	0	25,000	2,428,000	2,364,000	9,878,000	8,970,000	0	23,665,000

CAPITAL IMPROVEMENT PLAN - STREETS

97017 - Main Street Green Street Retrofit (Phase 2)

Project Need: Complete the last phase of Main Street Green Street improvements. This phase is from the railroad tracks north to Scoffins Street.

Project Description: The project will extend the improvements completed during Phase 1 to the improvements completed with the Pacific Highway / Main Street / Greenburg Road project. Improvements include new sidewalks, new asphaltic concrete, new storm and water main lines, and the collection and treatment of stormwater runoff using low impact development approaches (LIDA). The project will result in the entire length of Main Street constructed with green street features. The project will also add underground treatment facilities to treat offsite stormwater that flows into the Main Street storm system.

Project Funding: This project is partially funded by TriMet and Urban Renewal Funds. It includes scope and funding from CIP #94045 Commercial Street Stormwater Facility project, which is now closed.

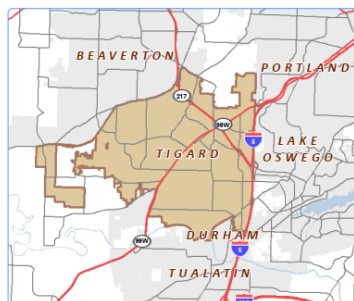
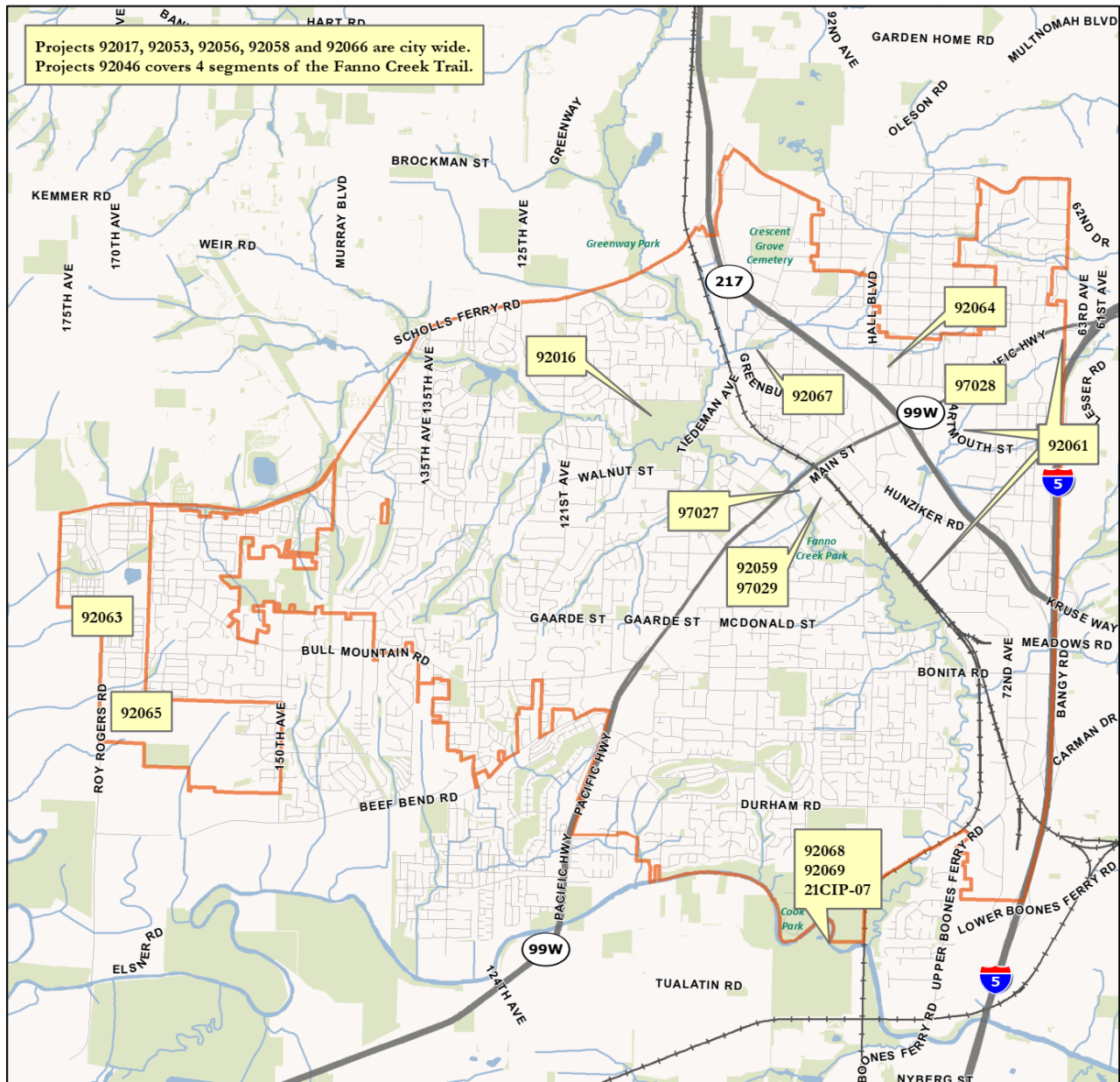
Operations and Maintenance Impact: Significant impact for maintenance of new green street stormwater facilities. Pavement upgrade may reduce pavement maintenance costs.

Total Project Cost: \$4,437,000

City of Tigard Project Cost: \$2,701,500

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	116,000	65,000	90,000	45,000	0	0	0	0	316,000
Total Internal	116,000	65,000	90,000	45,000	0	0	0	0	316,000
External Expenses									
Design and Engineering	111,000	300,000	410,000	150,000	0	0	0	0	971,000
Construction	0	0	2,000,000	850,000	0	0	0	0	2,850,000
Contingency	0	0	200,000	100,000	0	0	0	0	300,000
Total External	111,000	300,000	2,610,000	1,100,000	0	0	0	0	4,121,000
Total Project Expense	227,000	365,000	2,700,000	1,145,000	0	0	0	0	4,437,000
REVENUES									
Revenue Funding Source									
200-Gas Tax Fund	139,300	33,000	0	0	0	0	0	0	172,300
205-City Gas Tax Fund	85,000	165,000	1,374,000	565,000	0	0	0	0	2,189,000
511-Water Quality/Quantity Fund	0	0	340,000	0	0	0	0	0	340,000
Total Revenue Funding	224,300	198,000	1,714,000	565,000	0	0	0	0	2,701,300
Other Revenue Source									
TriMet	0	0	533,000	0	0	0	0	0	533,000
Urban Renewal Capital Improvement	2,700	167,000	453,000	580,000	0	0	0	0	1,202,700
Total Other Revenue	2,700	167,000	986,000	580,000	0	0	0	0	1,735,700
Total Revenues	227,000	365,000	2,700,000	1,145,000	0	0	0	0	4,437,000

CAPITAL IMPROVEMENT PLAN - PARKS



**The City of Tigard
Project Locations**

Tigard City Limits



0 0.5 1
Miles



City of Tigard Recommended Capital Improvement Plan FY 2022-27

CAPITAL IMPROVEMENT PLAN - PARKS

Project No.	Project Name	YTD 2021	2022	2023	2024	2025	2026	2027	Projected Total
21CIP-07	Copper Creek/Cook Park Stream Stabilization	0	0	0	0	215,000	686,000	0	901,000
92016	Dirksen Nature Park - Overall Project	30,000	55,000	30,000	30,000	15,000	15,000	0	175,000
92016-07	Dirksen Nature Park - Community Trail	0	75,000	740,000	0	0	0	0	815,000
92016-08	Dirksen Nature Park - Off-Street Parking Lot	65,000	405,000	0	0	0	0	0	470,000
92016-09	Dirksen Nature Park - Small Nature Play Area (Parking Area on Tigard St.)	0	0	0	232,000	0	0	0	232,000
92016-13	Dirksen Nature Park - Wetland Boardwalk and Walkway	315,000	355,000	0	0	0	0	0	670,000
92017	Tree Canopy Replacement Program	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
92046	Fanno Creek Trail Connection (RFFA Grant)	587,500	3,228,000	61,500	0	0	0	0	3,877,000
92053	Parks Major Maintenance Program	100,000	400,000	250,000	250,000	250,000	250,000	250,000	1,750,000
92056	Park System Master Plan Update	188,000	10,000	0	0	0	0	0	198,000
92058	City of Tigard / Tigard-Tualatin School District Park Development Program	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000
92059	Universal Plaza	875,000	3,405,000	0	0	0	0	0	4,280,000
92061	Red Rock Creek Trail Implementation Plan	10,000	55,945	0	0	0	0	0	65,945
92063	River Terrace Community Parks	0	0	1,100,000	0	0	2,000,000	0	3,100,000
92064	Steve Street Park and Trail	0	125,000	810,000	0	0	0	0	935,000
92065	Lasich Park Property Master Plan	0	203,000	180,000	0	0	0	0	383,000
92066	Trail System Master Plan	0	155,000	15,000	0	0	0	0	170,000
92067	Bagan Park	0	0	260,000	765,000	0	0	0	1,025,000
92068	Cook Park Accessible Boat Ramp	0	150,000	222,000	0	0	0	0	372,000
92069	Cook Park Inclusive Play Structure	0	575,000	0	0	0	0	0	575,000
97027	Nick Wilson Memorial Plaza	0	0	875,000	0	0	0	0	875,000
97028	Tigard Triangle Parks	0	3,800,000	0	0	0	0	0	3,800,000
97029	Fanno Creek Trail Connection to Universal Plaza	0	515,000	0	0	0	0	0	515,000
Total Funded		2,345,500	13,686,945	4,718,500	1,452,000	655,000	3,126,000	425,000	26,408,945

CAPITAL IMPROVEMENT PLAN - PARKS

21CIP-07 - Copper Creek/Cook Park Stream Stabilization

Project Need: The outfall of Copper Creek at the Tualatin River in Cook Park has developed severe erosion and is threatening the 108th Trail, a pedestrian bridge, and sanitary infrastructure in the park. The creek has been placed in temporary piping to protect these resources.

Project Description: The project will provide design, permitting, and construction of needed stream improvements to stop erosion and to protect existing park assets.

Operations and Maintenance Impact: Will result in reduced maintenance.

Total Project Cost: \$901,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	25,000	55,000	0	80,000
Total Internal	0	0	0	0	0	25,000	55,000	0	80,000
External Expenses									
Design and Engineering	0	0	0	0	0	180,000	50,000	0	230,000
Construction	0	0	0	0	0	0	550,000	0	550,000
Environmental Permit Compliance	0	0	0	0	0	0	6,000	0	6,000
Contingency	0	0	0	0	0	10,000	25,000	0	35,000
Total External	0	0	0	0	0	190,000	631,000	0	821,000
Total Project Expense	0	0	0	0	0	215,000	686,000	0	901,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	0	0	0	108,000	343,000	0	451,000
510-Stormwater Fund	0	0	0	0	0	107,000	343,000	0	450,000
Total Revenue Funding	0	0	0	0	0	215,000	686,000	0	901,000
Total Revenues	0	0	0	0	0	215,000	686,000	0	901,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016 - Dirksen Nature Park - Overall Project

Project Need: Dirksen Nature Park is a 48-acre community park that is being developed over several years with an emphasis on environmental education and community social activities.

Project Description: The majority of the property will remain a natural area, with approximately 35 acres protected under a conservation easement. This part of the project provides budget to apply for grants, oversee coordination between all site construction projects, and create interpretive and wayfinding elements for the park. The priority will be balancing the expanded use of the park for public benefit while restoring and maintaining the unique historic natural features of the site. This project supports the vision statement in Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Operations and Maintenance Impact: Overall, the park will have substantial cost impact and will require additional staff and equipment resources. See details in specific project descriptions.

Total Project Cost: \$4,648,000 (Actual costs through FY 2019-20 include the purchase of the park)

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	300,000	15,000	15,000	15,000	15,000	15,000	15,000	0	390,000
Total Internal	300,000	15,000	15,000	15,000	15,000	15,000	15,000	0	390,000
External Expenses									
Land/Right of Way Acquisition	3,638,000	0	0	0	0	0	0	0	3,638,000
Design and Engineering	535,000	15,000	40,000	15,000	15,000	0	0	0	620,000
Total External	4,173,000	15,000	40,000	15,000	15,000	0	0	0	4,258,000
Total Project Expense	4,473,000	30,000	55,000	30,000	30,000	15,000	15,000	0	4,648,000

REVENUES

Revenue Funding Source

260-Urban Forestry Fund	43,000	0	0	0	0	0	0	0	43,000
421-Parks Bond Fund	3,955,000	0	0	0	0	0	0	0	3,955,000
425-Parks SDC Fund	431,000	30,000	55,000	30,000	30,000	15,000	15,000	0	606,000
510-Stormwater Fund	44,000	0	0	0	0	0	0	0	44,000
Total Revenue Funding	4,473,000	30,000	55,000	30,000	30,000	15,000	15,000	0	4,648,000
Total Revenues	4,473,000	30,000	55,000	30,000	30,000	15,000	15,000	0	4,648,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-07 - Dirksen Nature Park - Community Trail

Project Need: The meandering multi-use path will serve a dual purpose, providing pedestrian infrastructure that is currently missing on Tigard Street and also creating a portion of the planned Summer Creek Trail, a community recreation trail noted in the 2011 Tigard Greenway Trail System Master Plan that connects to the existing Fanno Creek Greenway Trail network.

Project Description: This project will construct a 10-foot-wide, multi-use pathway that is part of the Summer Creek trail identified in the city's Trails Master Plan. Improvements will extend from the western end of the property and terminate just before the Tigard Street Bridge. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Operations and Maintenance Impact: Additional cost for pavement maintenance and vegetation control.

Total Project Cost: \$815,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	20,000	40,000	0	0	0	0	60,000
Total Internal	0	0	20,000	40,000	0	0	0	0	60,000
External Expenses									
Design and Engineering	0	0	50,000	20,000	0	0	0	0	70,000
Construction	0	0	0	605,000	0	0	0	0	605,000
Contingency	0	0	5,000	75,000	0	0	0	0	80,000
Total External	0	0	55,000	700,000	0	0	0	0	755,000
Total Project Expense	0	0	75,000	740,000	0	0	0	0	815,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	75,000	740,000	0	0	0	0	815,000
Total Revenue Funding	0	0	75,000	740,000	0	0	0	0	815,000
Total Revenues	0	0	75,000	740,000	0	0	0	0	815,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-08 - Dirksen Nature Park - Off-Street Parking Lot

Project Need: Dirksen Nature Park is expected to rise in popularity and attract increasing numbers of users. This project will provide parking for visitors and those driving to enjoy the Fanno Creek Trail.

Project Description: Construction of a parking lot adjacent to Tigard Street. Amenities include a 5-foot wide perimeter sidewalk, landscaping, irrigation, and lighting.

Operations and Maintenance Impact: Additional cost for maintenance of parking lot and amenities.

Total Project Cost: \$470,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	15,000	40,000	0	0	0	0	0	55,000
Total Internal	0	15,000	40,000	0	0	0	0	0	55,000
External Expenses									
Design and Engineering	0	50,000	15,000	0	0	0	0	0	65,000
Construction	0	0	310,000	0	0	0	0	0	310,000
Contingency	0	0	40,000	0	0	0	0	0	40,000
Total External	0	50,000	365,000	0	0	0	0	0	415,000
Total Project Expense	0	65,000	405,000	0	0	0	0	0	470,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	65,000	405,000	0	0	0	0	0	470,000
Total Revenue Funding	0	65,000	405,000	0	0	0	0	0	470,000
Total Revenues	0	65,000	405,000	0	0	0	0	0	470,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-09 - Dirksen Nature Park - Small Nature Play Area (Parking Area on Tigard St.)

Project Need: This project will protect Dirksen Nature Park's more sensitive lands by providing one of two active play areas that will allow intensive outdoor play outside of natural resource areas.

Project Description: Construct a nature play area adjacent to the off-street parking area on Tigard Street. This small play area is intended to provide an area for younger children to freely play without disturbing the natural features of the park. Located near parking, it will not require a long walk. The play area will include Americans with Disabilities Act (ADA) accessible structures.

Operations and Maintenance Impact: Additional cost for maintenance of play features and surfacing.

Total Project Cost: \$232,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	35,000	0	0	0	35,000
Total Internal	0	0	0	0	35,000	0	0	0	35,000
External Expenses									
Design and Engineering	0	0	0	0	40,000	0	0	0	40,000
Construction	0	0	0	0	140,000	0	0	0	140,000
Contingency	0	0	0	0	17,000	0	0	0	17,000
Total External	0	0	0	0	197,000	0	0	0	197,000
Total Project Expense	0	0	0	0	232,000	0	0	0	232,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	0	0	232,000	0	0	0	232,000
Total Revenue Funding	0	0	0	0	232,000	0	0	0	232,000
Total Revenues	0	0	0	0	232,000	0	0	0	232,000

CAPITAL IMPROVEMENT PLAN - PARKS

92016-13 - Dirksen Nature Park - Wetland Boardwalk and Walkway

Project Need: As an educational resource, the elevated boardwalk will allow park users an up-close and personal look at the Fanno Greenway floodplain. A paved pedestrian walkway is needed to connect the school to the park and the Fanno Creek Trail. Both the wetland boardwalk and walkway were previously removed from CIP #92016-01 and #92016-05 due to budget constraints.

Project Description: The elevated wetland boardwalk will be centrally located in the park extending from the Fanno Creek Trail into the Fanno Greenway floodplain. The boardwalk surface will consist of galvanized steel grating. The walkway will be an 8-foot-wide hard surface pathway from Summer Creek Bridge at Fowler Middle School to the Fanno Creek Trail. The walkway and boardwalk will be Americans with Disabilities Act (ADA) accessible.

Operations and Maintenance Impact: Additional costs for boardwalk and trail surfaces maintenance.

Total Project Cost: \$680,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	10,000	20,000	20,000	0	0	0	0	0	50,000
Total Internal	10,000	20,000	20,000	0	0	0	0	0	50,000
External Expenses									
Design and Engineering	0	270,000	5,000	0	0	0	0	0	275,000
Construction	0	0	310,000	0	0	0	0	0	310,000
Environmental Permit Compliance	0	25,000	0	0	0	0	0	0	25,000
Contingency	0	0	20,000	0	0	0	0	0	20,000
Total External	0	295,000	335,000	0	0	0	0	0	630,000
Total Project Expense	10,000	315,000	355,000	0	0	0	0	0	680,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	10,000	315,000	355,000	0	0	0	0	0	680,000
Total Revenue Funding	10,000	315,000	355,000	0	0	0	0	0	680,000
Total Revenues	10,000	315,000	355,000	0	0	0	0	0	680,000

CAPITAL IMPROVEMENT PLAN - PARKS

92017 - Tree Canopy Replacement Program

Project Need: Replaces and adds tree canopy along stream corridors, school grounds, streets, or other locations.

Project Description: The Tree Canopy Replacement Program is funded by developers who remove trees and pay a fee in lieu of planting required trees. This project plants replacement trees for large trees lost due to damage, disease, and other circumstances. Trees are planted citywide where additional tree canopy is needed. This also funds the Free Street Tree Program in which Tigard residents may request free tree(s). Throughout the fall and winter, the city will deliver and plant these trees. Funds can be used to maintain plantings during the establishment period when additional care is needed.

Operations and Maintenance Impact: Little or no impact.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Construction	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
Total External	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
Total Project Expense	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
REVENUES									
Revenue Funding Source									
260-Urban Forestry Fund	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
Total Revenue Funding	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000
Total Revenues	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000

CAPITAL IMPROVEMENT PLAN - PARKS

92046 - Fanno Creek Trail Connection (RFFA Grant)

Project Need: Construct segments of the Fanno Creek Regional Trail.

Project Description: This project constructs or improves four segments of the Fanno Creek Trail. Segment 1 - Woodard Park to Grant Avenue; Segment 2 - Ash Avenue to Hall Boulevard; Segment 3 - Tigard Library to Milton Court; Segment 4 - 85th Avenue (south of Durham Road) to the Ki-A-Kuts Bridge. All segments of the Fanno Creek Trail within Tigard will be complete except for the segment from Bonita Road to the Tualatin River. This supports the vision statement in the City of Tigard's Strategic Plan: "Tigard: an equitable community that is walkable, healthy, and accessible for everyone."

Project Funding: Project delivery is being managed through the Oregon Department of Transportation, who is administering the \$4,401,424 Regional Flexible Funds (RFFA) Grant. The city is obligated to cover all additional costs including budget increases and overages. Project cost increases have included ODOT staff expense, increased scope to widen the trail to meet federal requirements, extensive environmental permit requirements, and inflationary cost of delays.

Operations and Maintenance Impact: Increased costs for new pavement, bridges, boardwalks, and trail-side vegetation maintenance.

Total Project Cost: \$8,675,000

City of Tigard Project Cost: \$4,340,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	316,000	140,000	60,000	61,500	0	0	0	0	577,500
Total Internal	316,000	140,000	60,000	61,500	0	0	0	0	577,500
External Expenses									
Land/Right of Way Acquisition	0	104,000	0	0	0	0	0	0	104,000
Design and Engineering	147,000	291,000	0	0	0	0	0	0	438,000
Construction	0	0	3,002,000	0	0	0	0	0	3,002,000
Environmental Permit Compliance	0	52,500	91,000	0	0	0	0	0	143,500
Contingency	0	0	75,000	0	0	0	0	0	75,000
Total External	147,000	447,500	3,168,000	0	0	0	0	0	3,762,500
Total Project Expense	463,000	587,500	3,228,000	61,500	0	0	0	0	4,340,000

REVENUES

Revenue Funding Source

415-Transportation SDC Fund	98,000	205,500	1,133,000	22,500	0	0	0	0	1,459,000
425-Parks SDC Fund	349,000	382,000	2,095,000	39,000	0	0	0	0	2,865,000
510-Stormwater Fund	16,000	0	0	0	0	0	0	0	16,000
Total Revenue Funding	463,000	587,500	3,228,000	61,500	0	0	0	0	4,340,000
Total Revenues	463,000	587,500	3,228,000	61,500	0	0	0	0	4,340,000

CAPITAL IMPROVEMENT PLAN - PARKS

92053 - Parks Major Maintenance Program

Project Need: Tigard has more acres of park land per capita than the national average; yet we spend significantly less per acre than average for maintenance. This means Tigard has a backlog of park facilities in need of improvement or replacement. Major items like trail, bridge, or playground replacements and improvements cannot be completed with existing funds.

Project Description: This program funds limited parks major maintenance and improvement projects including large-scale technical work and repair. These include replacement or improvement of amenities like trails, bridges, irrigation systems, and buildings. Priority is on urgent repairs, life-safety concerns, and Americans with Disabilities Act (ADA) retrofits.

Project Funding: This work is funded from revenue from the citywide Parks Reimbursement System Development Charge.

Operations and Maintenance Impact: None. May slightly reduce some ongoing maintenance costs by repairing and replacing older park features.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	35,000	40,000	40,000	40,000	40,000	40,000	40,000	275,000
Total Internal	0	35,000	40,000	40,000	40,000	40,000	40,000	40,000	275,000
External Expenses									
Project Estimate	0	65,000	360,000	210,000	210,000	210,000	210,000	210,000	1,475,000
Total External	0	65,000	360,000	210,000	210,000	210,000	210,000	210,000	1,475,000
Total Project Expense	0	100,000	400,000	250,000	250,000	250,000	250,000	250,000	1,750,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	100,000	400,000	250,000	250,000	250,000	250,000	250,000	1,750,000
Total Revenue Funding	0	100,000	400,000	250,000	250,000	250,000	250,000	250,000	1,750,000
Total Revenues	0	100,000	400,000	250,000	250,000	250,000	250,000	250,000	1,750,000

CAPITAL IMPROVEMENT PLAN - PARKS

92056 - Park System Master Plan Update

Project Need: The city's Park System Master Plan is due for an update. The current Park System Master Plan was completed in 2009 with an Addendum adopted in 2014 to include River Terrace. The plan is critical to identify, prioritize, and guide parks and trails development across the city through 2030. The plan will respond to the recreational needs of a growing community.

Project Description: The Park System Master Plan Update will examine existing parks system facilities, programs, and services. Community involvement and public input will be a critical component of the process that will help determine the current and future parks and recreation service levels. The updated plan will include a conditions assessment and prioritize the needs and desires for upgrading and creating new facilities and services.

Operations and Maintenance Impact: None from the plan. Future park improvements will have impacts.

Total Project Cost: \$302,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	27,000	45,000	3,000	0	0	0	0	0	75,000
Total Internal	27,000	45,000	3,000	0	0	0	0	0	75,000
External Expenses									
Design and Engineering	77,000	143,000	7,000	0	0	0	0	0	227,000
Total External	77,000	143,000	7,000	0	0	0	0	0	227,000
Total Project Expense	104,000	188,000	10,000	0	0	0	0	0	302,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	104,000	188,000	10,000	0	0	0	0	0	302,000
Total Revenue Funding	104,000	188,000	10,000	0	0	0	0	0	302,000
Total Revenues	104,000	188,000	10,000	0	0	0	0	0	302,000

CAPITAL IMPROVEMENT PLAN - PARKS

92058 - City of Tigard / Tigard-Tualatin School District Park Development Program

Project Need: The project provides funding for a partnership between the City of Tigard and the Tigard-Tualatin School District (TTSD) in support of an Intergovernmental Agreement for public use of school property. The partnership allows development of school property with park-like facilities that benefit Tigard citizens.

Project Description: The Tigard-Tualatin School District has land that could be developed for shared park uses and the Tigard Park System Master Plan recommends the city fund needed improvements on TTSD sites. The developments would benefit Tigard citizens and could include projects such as community gardens, improved playing fields, or accessible pathways connecting neighborhoods.

Operations and Maintenance Impact: Increased park maintenance needs for field improvements, community gardens, play/exercise equipment, etc., varying by site.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Design and Engineering	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000
Total External	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000
Total Project Expense	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000
Total Revenue Funding	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000
Total Revenues	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	175,000

CAPITAL IMPROVEMENT PLAN - PARKS

92059 - Universal Plaza

Project Need: A Tigard City Council 2018-19 goal and a City Center Urban Renewal Plan goal is to provide more downtown public gathering places.

Project Description: The Universal Plaza will provide an important public space amenity in downtown Tigard. It will be constructed on Town Center Development Agency-owned land and will provide a venue for large events like the Tigard Farmer's Market, Concerts in the Park, and Movies in the Park. The plaza may also feature a splash pad, interpretive artwork and installations, and a connection to the Fanno Creek Park.

Project Funding: This project is partially funded by the Urban Renewal Fund.

Operations and Maintenance Impact: The plaza will add significant cost increases for maintenance, staffing, and programming.

Total Project Cost: \$4,976,000

City of Tigard Project Cost: \$2,275,400

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	10,000	10,000	0	0	0	0	0	20,000
Total Internal	0	10,000	10,000	0	0	0	0	0	20,000
External Expenses									
Land/Right of Way Acquisition	455,000	0	0	0	0	0	0	0	455,000
Design and Engineering	210,000	745,000	220,000	0	0	0	0	0	1,175,000
Construction	31,000	120,000	2,985,000	0	0	0	0	0	3,136,000
Contingency	0	0	190,000	0	0	0	0	0	190,000
Total External	696,000	865,000	3,395,000	0	0	0	0	0	4,956,000
Total Project Expense	696,000	875,000	3,405,000	0	0	0	0	0	4,976,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	154,000	550,400	1,571,000	0	0	0	0	0	2,275,400
Total Revenue Funding	154,000	550,400	1,571,000	0	0	0	0	0	2,275,400
Other Revenue Source									
Urban Renewal Capital Improvement	542,000	324,600	1,834,000	0	0	0	0	0	2,700,600
Total Other Revenue	542,000	324,600	1,834,000	0	0	0	0	0	2,700,600
Total Revenues	696,000	875,000	3,405,000	0	0	0	0	0	4,976,000

CAPITAL IMPROVEMENT PLAN - PARKS

92061 - Red Rock Creek Trail Implementation Plan

Project Need: Prepare an implementation plan for development of the Red Rock Creek Trail through the Tigard Triangle. This effort is in support of planning and development activities currently underway as part of the Tigard Triangle Urban Renewal Equitable Development Plan, the Hunziker Core Industrial Area, and the Tigard Triangle Stormwater Implementation Plan.

Project Description: The Red Rock Creek Trail will provide the primary non-motorized transportation and recreation route through the Tigard Triangle and will support redevelopment of the area. The plan will identify a preferred alignment and implementation strategy for the proposed two-mile trail that extends from the Fanno Creek Regional Trail to SW 64th Street at Pacific Highway.

Project Funding: The city has been awarded a \$314,055 Regional Flexible Funds Allocation (RFFA) grant and \$35,945 from the MSTIP Opportunity Funds grant that will fund this project other than the cost of internal staff time. The RFFA grant is federal funding and as such will be administered by ODOT, so costs below only reflect Tigard funds and MSTIP funds.

Operations and Maintenance Impact: None from the plan. Future trail development will have impacts as new infrastructure is added.

Total Project Cost: \$380,000

City of Tigard Project Cost: \$30,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	10,000	20,000	0	0	0	0	0	30,000
Total Internal	0	10,000	20,000	0	0	0	0	0	30,000
External Expenses									
Design and Engineering	0	0	35,945	0	0	0	0	0	35,945
Total External	0	0	35,945	0	0	0	0	0	35,945
Total Project Expense	0	10,000	55,945	0	0	0	0	0	65,945
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	10,000	20,000	0	0	0	0	0	30,000
Total Revenue Funding	0	10,000	20,000	0	0	0	0	0	30,000
Other Revenue Source									
Washington County MSTIP	0	0	35,945	0	0	0	0	0	35,945
Total Other Revenue	0	0	35,945	0	0	0	0	0	35,945
Total Revenues	0	10,000	55,945	0	0	0	0	0	65,945

CAPITAL IMPROVEMENT PLAN - PARKS

92063 - River Terrace Community Parks

Project Need: In order to meet the city's minimum community park standards, about 20 acres are needed to serve the new River Terrace area. The River Terrace Community Plan, adopted by city council in December 2014, recommends two community parks be developed, one in the north and one in the south.

Project Description: This project is a placeholder for land acquisition, design and construction of community park facilities at two sites. The first site is currently planned to be just southwest of River Terrace on land purchased by the city in 2015. The location of the second site is yet to be finalized but will likely be located in the northern portion of River Terrace and will require some land acquisition as well as design and construction. The early funds are for acquisition and later year funds are a placeholder for parks development. This is anticipated to be coordinated with development of adjacent areas.

Operations and Maintenance Impact: Minor impact for low-level maintenance of purchased, undeveloped lands. There will be significant impact if the park is developed.

Total Project Cost: \$3,100,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Land/Right of Way Acquisition	0	0	0	1,100,000	0	0	2,000,000	0	3,100,000
Total External	0	0	0	1,100,000	0	0	2,000,000	0	3,100,000
Total Project Expense	0	0	0	1,100,000	0	0	2,000,000	0	3,100,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	0	1,100,000	0	0	2,000,000	0	3,100,000
Total Revenue Funding	0	0	0	1,100,000	0	0	2,000,000	0	3,100,000
Total Revenues	0	0	0	1,100,000	0	0	2,000,000	0	3,100,000

CAPITAL IMPROVEMENT PLAN - PARKS

92064 - Steve Street Park and Trail

Project Need: This project involves the design, construction, and installation of a neighborhood park in an area lacking in parks. The property was purchased with funding from the 2010 park bond. Until now, no funding was identified to develop the park. The trail through the park will connect small neighborhoods and improve pedestrian access.

Project Descriptions: A concept plan was developed for the park in 2014. This project will construct a trail through the park connecting Steve Street and SW 84th Avenue. Development of the park includes a community garden, a play structure, and an open lawn area. The turnaround at the end of 84th Avenue will be improved providing better visibility into the park. The city will continue to pursue grant funding to complete construction of all new park elements.

Project Funding: It is anticipated the Metro Parks Bond Local Share funds will be available to fund approximately half of this project.

Operations and Maintenance Impact: Will add a new park and require additional staff and equipment resources.

Total Project Cost: \$935,000

City of Tigard Project Cost: \$467,500

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	20,000	85,000	0	0	0	0	105,000
Total Internal	0	0	20,000	85,000	0	0	0	0	105,000
External Expenses									
Design and Engineering	0	0	85,000	25,000	0	0	0	0	110,000
Construction	0	0	0	625,000	0	0	0	0	625,000
Contingency	0	0	20,000	75,000	0	0	0	0	95,000
Total External	0	0	105,000	725,000	0	0	0	0	830,000
Total Project Expense	0	0	125,000	810,000	0	0	0	0	935,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	62,500	405,000	0	0	0	0	467,500
Total Revenue Funding	0	0	62,500	405,000	0	0	0	0	467,500
Other Revenue Source									
Proposed Metro Local Share	0	0	62,500	405,000	0	0	0	0	467,500
Total Other Revenue	0	0	62,500	405,000	0	0	0	0	467,500
Total Revenues	0	0	125,000	810,000	0	0	0	0	935,000

CAPITAL IMPROVEMENT PLAN - PARKS

92065 - Lasich Park Property Master Plan

Project Need: Tigard is experiencing significant population growth and will need an additional community park in the future. To plan for this need, a 28-acre parcel, known as the Lasich Property, was purchased at the intersection of SW Beef Bend and SW Roy Rogers Roads.

Project Description: This project will develop a master plan for a community park at the Lasich Property. The project includes public outreach to critical stakeholder groups to identify the recreational facilities needed at the park. Concurrently, the Lasich Property will also provide public access to the Tualatin River. This will be done in 3 phases: (1) planning; (2) design, engineering, and permitting; and, (3) construction with grant proposals to be submitted to the Oregon State Marine Board for funding support. The project as currently budgeted includes the master plan and river access design only, not construction.

Project Funding: The project budget includes assumption of receipt of Marine Board grant for river access design.

Operations and Maintenance Impact: Minor impact for low-level maintenance of purchased, undeveloped lands. There will be significant impact if the park is developed.

Total Project Cost: \$383,000

City of Tigard Project Cost: \$255,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	40,000	20,000	0	0	0	0	60,000
Total Internal	0	0	40,000	20,000	0	0	0	0	60,000
External Expenses									
Design and Engineering	0	0	163,000	160,000	0	0	0	0	323,000
Total External	0	0	163,000	160,000	0	0	0	0	323,000
Total Project Expense	0	0	203,000	180,000	0	0	0	0	383,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	165,000	90,000	0	0	0	0	255,000
Total Revenue Funding	0	0	165,000	90,000	0	0	0	0	255,000
Other Revenue Source									
OR State Marine Board Grant	0	0	38,000	90,000	0	0	0	0	128,000
Total Other Revenue	0	0	38,000	90,000	0	0	0	0	128,000
Total Revenues	0	0	203,000	180,000	0	0	0	0	383,000

CAPITAL IMPROVEMENT PLAN - PARKS

92066 - Trail System Master Plan

Project Need: The Tigard Trail System Master Plan was completed in 2011. The trails plan is due to be updated to identify a strategy for trail development within the current development and recreation climate in Tigard.

Project Description: The plan update will identify strategies and opportunities for active transportation and recreation in Tigard. It will map improvements for connectivity of the trail system from regional greenway trails to sidewalk, bike lanes, and local trails.

Operations and Maintenance Impact: None for plan development.

Total Project Cost: \$170,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	35,000	5,000	0	0	0	0	40,000
Total Internal	0	0	35,000	5,000	0	0	0	0	40,000
External Expenses									
Design and Engineering	0	0	115,000	10,000	0	0	0	0	125,000
Contingency	0	0	5,000	0	0	0	0	0	5,000
Total External	0	0	120,000	10,000	0	0	0	0	130,000
Total Project Expense	0	0	155,000	15,000	0	0	0	0	170,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	155,000	15,000	0	0	0	0	170,000
Total Revenue Funding	0	0	155,000	15,000	0	0	0	0	170,000
Total Revenues	0	0	155,000	15,000	0	0	0	0	170,000

CAPITAL IMPROVEMENT PLAN - PARKS

92067 - Bagan Park

Project Need: This project involves the design, construction, and installation of a neighborhood park off of Greenburg Road in an underserved area that is lacking parks. The property was purchased in 2013 with funding from the 2010 Park Bond. A master plan update will be completed to incorporate a new property that was donated to the city adjacent to the current property.

Project Description: Preliminary planning was done in 2015 and it identified that a detailed design and planning effort will be required to address wetland, Clean Water Services, and stormwater requirements prior to park development.

Project Funding: It is anticipated that Metro Parks Bond Local Share funds will be available to fund approximately half of this project.

Operations and Maintenance Impact: This new facility will require additional staffing for ongoing operations and maintenance.

Total Project Cost: \$1,025,000

City of Tigard Project Cost: \$512,500

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	50,000	35,000	0	0	0	85,000
Total Internal	0	0	0	50,000	35,000	0	0	0	85,000
External Expenses									
Design and Engineering	0	0	0	190,000	30,000	0	0	0	220,000
Construction	0	0	0	0	600,000	0	0	0	600,000
Contingency	0	0	0	20,000	100,000	0	0	0	120,000
Total External	0	0	0	210,000	730,000	0	0	0	940,000
Total Project Expense	0	0	0	260,000	765,000	0	0	0	1,025,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	0	130,000	382,500	0	0	0	512,500
Total Revenue Funding	0	0	0	130,000	382,500	0	0	0	512,500
Other Revenue Source									
Proposed Metro Local Share	0	0	0	130,000	382,500	0	0	0	512,500
Total Other Revenue	0	0	0	130,000	382,500	0	0	0	512,500
Total Revenues	0	0	0	260,000	765,000	0	0	0	1,025,000

CAPITAL IMPROVEMENT PLAN - PARKS

92068 - Cook Park Accessible Boat Ramp

Project Need: The existing boat ramp and boarding dock was rebuilt in 1997 following the 1996 floods. The boarding docks have aged well beyond useful life and are in need of replacement. There is also a demand for a handicap accessible small craft boat launch.

Project Description: This project will replace the obsolete wooden boarding docks with new technology using recycled plastic materials. The new docks will also incorporate a handicap accessible boat launch. Design, engineering, and permitting will be required before construction and installation with some requirement for sediment removal.

Project Funding: The project budget includes assumption of receipt of Marine Board grant.

Operations and Maintenance Impact: Minimal impact to ongoing operations and maintenance.

Total Project Cost: \$372,000

City of Tigard Project Cost: \$177,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	20,000	30,000	0	0	0	0	50,000
Total Internal	0	0	20,000	30,000	0	0	0	0	50,000
External Expenses									
Design and Engineering	0	0	120,000	20,000	0	0	0	0	140,000
Construction	0	0	0	140,000	0	0	0	0	140,000
Contingency	0	0	10,000	32,000	0	0	0	0	42,000
Total External	0	0	130,000	192,000	0	0	0	0	322,000
Total Project Expense	0	0	150,000	222,000	0	0	0	0	372,000
REVENUES									
Revenue Funding Source									
425-Parks SDC Fund	0	0	72,000	105,000	0	0	0	0	177,000
Total Revenue Funding	0	0	72,000	105,000	0	0	0	0	177,000
Other Revenue Source									
OR State Marine Board Grant	0	0	78,000	117,000	0	0	0	0	195,000
Total Other Revenue	0	0	78,000	117,000	0	0	0	0	195,000
Total Revenues	0	0	150,000	222,000	0	0	0	0	372,000

CAPITAL IMPROVEMENT PLAN - PARKS

92069 - Cook Park Inclusive Play Structure

Project Need: The large community playground at Cook Park was installed in 1993. Of the 21 playgrounds on city property, it is the oldest by eight years. Its design is outdated and the finishes are wearing out. As a community, we need a new, large community playground designed to maximize inclusion and fun for community members of all abilities.

Project Description: Remove the main playground at Cook Park and replace it with a more modern, inclusive, and accessible play structure.

Project Funding: Project will be paid for with Metro Parks Bond Local Share.

Operations and Maintenance Impact: A slight net reduction in O+M. Approximately \$2,500 per year less for purchases of engineered wood fiber fall material. Labor costs for raking and adding wood fiber would be reduced. Popularity of the playground could increase which could lead to increased litter patrol and restroom cleaning.

Total Project Cost: \$575,000

City of Tigard Project Cost: \$0

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	20,000	0	0	0	0	0	20,000
Total Internal	0	0	20,000	0	0	0	0	0	20,000
External Expenses									
Construction	0	0	535,000	0	0	0	0	0	535,000
Contingency	0	0	20,000	0	0	0	0	0	20,000
Total External	0	0	555,000	0	0	0	0	0	555,000
Total Project Expense	0	0	575,000	0	0	0	0	0	575,000
REVENUES									
Other Revenue Source									
Proposed Metro Local Share	0	0	575,000	0	0	0	0	0	575,000
Total Other Revenue	0	0	575,000	0	0	0	0	0	575,000
Total Revenues	0	0	575,000	0	0	0	0	0	575,000

CAPITAL IMPROVEMENT PLAN - PARKS

97027 - Nick Wilson Memorial Plaza

Project Need: An Overlook of the Fanno Creek on Main Street will provide access to the natural and recreational resources of the creek and trail.

Project Description: Construct an overlook at the Fanno Creek at Main Street that will add additional public space and serve as an attractive amenity for downtown visitors and residents.

Operations and Maintenance Impact: Will add a new public space that will require additional staff and equipment resources.

Total Project Cost: \$1,198,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Land/Right of Way Acquisition	323,000	0	0	0	0	0	0	0	323,000
Design and Engineering	0	0	0	175,000	0	0	0	0	175,000
Construction	0	0	0	650,000	0	0	0	0	650,000
Contingency	0	0	0	50,000	0	0	0	0	50,000
Total External	323,000	0	0	875,000	0	0	0	0	1,198,000
Total Project Expense	323,000	0	0	875,000	0	0	0	0	1,198,000

REVENUES

Other Revenue Source

Urban Renewal Capital Improvement	323,000	0	0	875,000	0	0	0	0	1,198,000
Total Other Revenue	323,000	0	0	875,000	0	0	0	0	1,198,000
Total Revenues	323,000	0	0	875,000	0	0	0	0	1,198,000

CAPITAL IMPROVEMENT PLAN - PARKS

97028 - Tigard Triangle Parks

Project Need: The Tigard Triangle currently has no park land. As more residents move into the Triangle area, parks and open space will be essential.

Project Description: Acquire park land in the Tigard Triangle. This was ranked as a near-term priority in A New Tigard Triangle: Planning for Equitable Development Implementation Strategy.

Operations and Maintenance Impact: Minor impact for low-level maintenance of purchased, undeveloped lands. There will be significant impact if the park is developed.

Total Project Cost: \$3,800,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Land/Right of Way Acquisition	0	0	3,800,000	0	0	0	0	0	3,800,000
Total External	0	0	3,800,000	0	0	0	0	0	3,800,000
Total Project Expense	0	0	3,800,000	0	0	0	0	0	3,800,000
REVENUES									
Revenue Funding Source									
421-Parks Bond Fund	0	0	826,500	0	0	0	0	0	826,500
Total Revenue Funding	0	0	826,500	0	0	0	0	0	826,500
Other Revenue Source									
Urban Renewal Capital Improvement	0	0	2,973,500	0	0	0	0	0	2,973,500
Total Other Revenue	0	0	2,973,500	0	0	0	0	0	2,973,500
Total Revenues	0	0	3,800,000	0	0	0	0	0	3,800,000

CAPITAL IMPROVEMENT PLAN - PARKS

97029 - Fanno Creek Trail Connection to Universal Plaza

Project Need: The city will be making a major investment in the Universal Plaza, a central gathering space for Tigard. This project will provide an important connection from the Fanno Creek Trail to the Universal Plaza.

Project Description: Design, permitting, and construction of a trail and overlook connecting Fanno Creek Trail to the Universal Plaza.

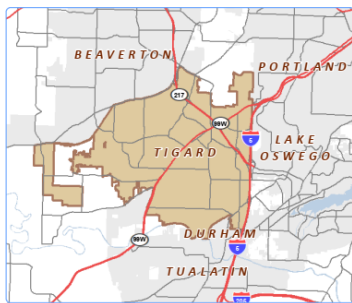
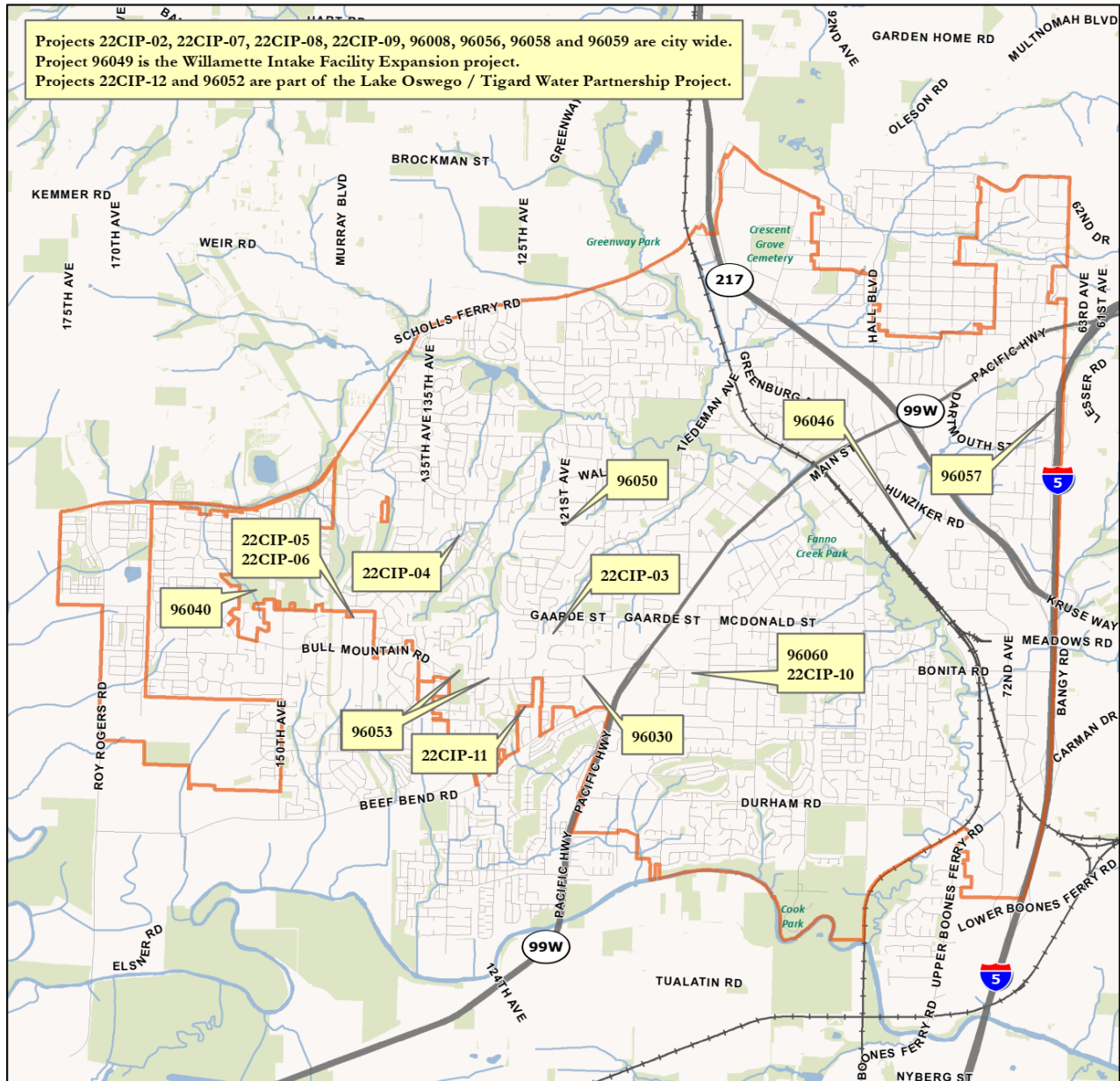
Project Funding: The project will be solely funded by City Center Urban Renewal funds.

Operations and Maintenance Impact: Minimal impact for trail maintenance.

Total Project Cost: \$515,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Design and Engineering	0	0	75,000	0	0	0	0	0	75,000
Construction	0	0	409,000	0	0	0	0	0	409,000
Contingency	0	0	31,000	0	0	0	0	0	31,000
Total External	0	0	515,000	0	0	0	0	0	515,000
Total Project Expense	0	0	515,000	0	0	0	0	0	515,000
REVENUES									
Other Revenue Source									
Urban Renewal Capital Improvement	0	0	515,000	0	0	0	0	0	515,000
Total Other Revenue	0	0	515,000	0	0	0	0	0	515,000
Total Revenues	0	0	515,000	0	0	0	0	0	515,000

CAPITAL IMPROVEMENT PLAN - WATER



The City of Tigard Project Locations

 Tigard City Limits



0 0.5 1 Miles



City of Tigard Recommended Capital Improvement Plan FY 2022-27

CAPITAL IMPROVEMENT PLAN - WATER

Project No.	Project Name	YTD 2021	2022	2023	2024	2025	2026	2027	Projected Total
22CIP-02	Fifty-Year Water Distribution System Seismic Plan	0	0	155,000	0	0	0	0	155,000
22CIP-03	Abandon Gaarde Reservoir 2	0	0	0	0	91,500	0	0	91,500
22CIP-04	Pressure Zone Consolidation - Zones 560C and D	0	0	0	124,000	432,000	0	0	556,000
22CIP-05	High Tor Reservoir 8-1 Structural Improvements	0	0	0	610,000	1,275,000	0	0	1,885,000
22CIP-06	High Tor Pump Station 8 Rebuild	0	0	0	0	0	908,005	3,367,000	4,275,005
22CIP-07	ASR Expansion Feasibility Study	0	0	0	0	1,151,000	0	0	1,151,000
22CIP-08	Water Management and Conservation Plan	0	0	0	0	0	103,000	0	103,000
22CIP-09	Water Master Plan	0	0	0	0	0	285,000	0	285,000
22CIP-10	Abandon Canterbury Reservoirs 1-1 and 1-2 and Pump Station 1	0	0	0	0	0	20	454,000	454,020
22CIP-11	Abandon Reservoir 4	0	0	0	0	0	20	178,000	178,020
22CIP-12	Lake Oswego/Tigard Water Supply Expansion	0	0	0	0	0	920,005	5,850,000	6,770,005
96008	Water Main Line Oversizing Program	260,000	160,000	160,000	160,000	160,000	160,000	160,000	1,220,000
96030	Bull Mountain Road Water Pipeline	0	0	0	2,272,000	12,271,500	0	0	14,543,500
96040	Cach Reservoir 18 and Pump Station	480,000	6,506,000	13,389,500	3,065,000	0	0	0	23,440,500
96046	Red Rock Creek Waterline Relocation	188,000	397,000	0	0	0	0	0	585,000
96049	Willamette Intake Facility Expansion	1,040,000	809,000	0	0	0	0	0	1,849,000
96050	Fonner Street / 121st Avenue Valve and Piping Improvements	130,000	655,000	655,000	0	0	0	0	1,440,000
96052	Fifth Pump at the River Intake Pump Station (RIPS)	250,000	170,000	0	0	0	0	0	420,000
96053	Aquifer Storage and Recovery Well #2 and Well #3	1,786,000	4,554,000	0	0	0	0	0	6,340,000
96056	Water System Development Charge (SDC) Study	15,000	25,000	0	0	0	0	0	40,000
96057	Abandon Baylor Reservoirs 9-1 and 9-2 and Hunziker Pump Station 11	0	389,000	0	0	0	0	0	389,000
96058	Pipeline Renewal and Replacement Program	0	1,100,000	1,194,000	3,677,000	2,688,000	3,798,000	6,328,000	18,785,000
96059	Water System Major Maintenance Program	0	150,000	150,000	150,000	150,000	150,000	150,000	900,000
96060	Generator Replacement at Canterbury Pump Station	0	200,000	0	0	0	0	0	200,000
Total Funded		4,149,000	15,115,000	15,703,500	10,058,000	18,219,000	6,324,050	16,487,000	86,055,550

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-02 - Fifty-Year Water Distribution System Seismic Plan

Project Need: The 2020 Water Master Plan identified a piping seismic backbone that would be used to move water throughout the city if a major seismic event were to occur. A Fifty-Year Water Distribution System Seismic Plan will develop a strategy for seismically hardening that backbone.

Project Description: Develop a plan for seismically hardening the backbone identified in the 2020 Water Master Plan. The plan should also include further seismic analyses of Bonita Pump Station 5 and Menlor Reservoir 13 and develop a fifty-year capital improvement plan that addresses this seismic hardening plan.

Operations and Maintenance Impact: None.

Total Project Cost: \$155,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	40,000	0	0	0	0	40,000
Total Internal	0	0	0	40,000	0	0	0	0	40,000
External Expenses									
Design and Engineering	0	0	0	103,000	0	0	0	0	103,000
Contingency	0	0	0	12,000	0	0	0	0	12,000
Total External	0	0	0	115,000	0	0	0	0	115,000
Total Project Expense	0	0	0	155,000	0	0	0	0	155,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	155,000	0	0	0	0	155,000
Total Revenue Funding	0	0	0	155,000	0	0	0	0	155,000
Total Revenues	0	0	0	155,000	0	0	0	0	155,000

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-03 - Abandon Gaarde Reservoir 2

Project Need: Certain existing reservoirs and pump stations were identified in the 2020 Master Plan for abandonment due to either having reached the end of their life cycle or limitations that do not allow them to be operated optimally for maximum system efficiency. Due to both Gaarde Reservoir 2's age and limited storage capacity, it was recommended for abandonment.

Project Description: Properly abandon Gaarde Reservoir 2. This project needs to be coordinated with the Bull Mountain Road Waterline Project.

Operations and Maintenance Impact: None.

Total Project Cost: \$91,500

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	25,000	0	0	25,000
Total Internal	0	0	0	0	0	25,000	0	0	25,000
External Expenses									
Design and Engineering	0	0	0	0	0	15,000	0	0	15,000
Construction	0	0	0	0	0	45,000	0	0	45,000
Contingency	0	0	0	0	0	6,500	0	0	6,500
Total External	0	0	0	0	0	66,500	0	0	66,500
Total Project Expense	0	0	0	0	0	91,500	0	0	91,500
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	91,500	0	0	91,500
Total Revenue Funding	0	0	0	0	0	91,500	0	0	91,500
Total Revenues	0	0	0	0	0	91,500	0	0	91,500

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-04 - Pressure Zone Consolidation - Zones 560C and D

Project Need: Due to topographic limitations of Bull Mountain and varying times of past development, the 560-foot pressure zone (PZ) is comprised of eight independent subzones: 560A-H. Water is supplied to these subzones from the upper pressure zone (713-foot PZ) via pressure reducing valves (PRVs). The PRVs require regular maintenance and specialized training in order to operate them. Therefore, the 2020 Water Master Plan recommended consolidating these subzones as much as possible.

Project Description: In order to connect the 560C and D subzones, the following work must be performed: demolish the existing PRV at Greenfield Drive and SW 132nd Avenue and install a new PRV at Greenfield Drive and Benchview Terrace (to provide fire flow, if modeling indicates it is necessary), install necessary piping connections to connect the subzones, and demolish the historic pump station on SW 132nd Avenue.

Operations and Maintenance Impact: Expect some reduction in time and cost of system operations and maintenance.

Total Project Cost: \$556,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	20,000	30,000	0	0	50,000
Total Internal	0	0	0	0	20,000	30,000	0	0	50,000
External Expenses									
Design and Engineering	0	0	0	0	94,000	27,000	0	0	121,000
Construction	0	0	0	0	0	335,000	0	0	335,000
Contingency	0	0	0	0	10,000	40,000	0	0	50,000
Total External	0	0	0	0	104,000	402,000	0	0	506,000
Total Project Expense	0	0	0	0	124,000	432,000	0	0	556,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	124,000	432,000	0	0	556,000
Total Revenue Funding	0	0	0	0	124,000	432,000	0	0	556,000
Total Revenues	0	0	0	0	124,000	432,000	0	0	556,000

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-05 - High Tor Reservoir 8-1 Structural Improvements

Project Need: In fall of 2020, exposed rebar was noted in multiple areas of the roof of High Tor Reservoir 8-1. A structural condition assessment of the roof was immediately completed. The assessment determined that while roof failure is not thought to be imminent, the roof itself is nearing the end of its usable life as cracks were noted along the reinforcing grid spacing (i.e., structural rebar) on both the roof exterior as well as the roof interior. Cracks and efflorescence on the roof interior indicate that the intrusion of external water is occurring, which poses a potential contamination risk. Cracks were also noted along the interior roof beams, which may indicate potential overstresses in the beams. A waterproofing epoxy coating will be applied to the roof exterior in the near term to prevent further water seepage; however, further structural analysis and improvements must be considered to address the sagging of the roof and cracking in the beams.

Project Description: A structural analysis will first be performed to determine the best course of action to address the sagging roof and cracked beams. Following the analysis and design, construction activities will occur. Construction can only be started once Cach Reservoir 18 is complete and must be completed within one fiscal year as High Tor Reservoir 8-1 cannot be offline during the peak summer season.

Operations and Maintenance Impact: Slight impact during construction activities in FY 2025 as reservoir will be offline, but none once reservoir is back in service.

Total Project Cost: \$1,885,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	60,000	120,000	0	0	180,000
Total Internal	0	0	0	0	60,000	120,000	0	0	180,000
External Expenses									
Design and Engineering	0	0	0	0	495,000	75,000	0	0	570,000
Construction	0	0	0	0	0	964,500	0	0	964,500
Contingency	0	0	0	0	55,000	115,500	0	0	170,500
Total External	0	0	0	0	550,000	1,155,000	0	0	1,705,000
Total Project Expense	0	0	0	0	610,000	1,275,000	0	0	1,885,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	610,000	1,275,000	0	0	1,885,000
Total Revenue Funding	0	0	0	0	610,000	1,275,000	0	0	1,885,000
Total Revenues	0	0	0	0	610,000	1,275,000	0	0	1,885,000

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-06 - High Tor Pump Station 8 Rebuild

Project Need: The 2020 Water Master Plan identified the High Tor Pump Station 8 as being near the end of its usable life and High Tor Reservoir 8-3 for abandonment due to its age and limited storage capacity. In addition, the High Tor Pump Station is currently split between two sites, which is abnormal: two pumps are on the north site with High Tor Reservoir 8-3 and three pumps are located on the south site with the remaining High Tor Reservoirs 8-1 and 8-2. It was also determined that rebuilding High Tor Pump Station 8 on the north site would be the best use of the property and advantageous for operations and maintenance staff as all pumps would be co-located in one pump station.

Project Description: High Tor Reservoir 8-3 to be properly abandoned and a new High Tor Pump Station 8 to be built on the north site. The existing pump station vaults on the north and south sites will be properly abandoned as well. Cannot be completed until the High Tor Reservoir 8-1 roof structural issues (CIP #22CIP-05) have been addressed, which in turn cannot begin until Cach Reservoir 18 is fully online.

Operations and Maintenance Impact: Slight decrease once High Tor Reservoir 8-3 is demolished. New pump station should not impact operations and maintenance as same pumping capacity will be replaced.

Total Project Cost: \$4,275,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	75,000	125,000	200,000
Total Internal	0	0	0	0	0	0	75,000	125,000	200,000
External Expenses									
Design and Engineering	0	0	0	0	0	0	750,000	150,000	900,000
Construction	0	0	0	0	0	0	5	2,775,000	2,775,005
Contingency	0	0	0	0	0	0	83,000	317,000	400,000
Total External	0	0	0	0	0	0	833,005	3,242,000	4,075,005
Total Project Expense	0	0	0	0	0	0	908,005	3,367,000	4,275,005
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	0	908,000	3,367,000	4,275,000
Total Revenue Funding	0	0	0	0	0	0	908,000	3,367,000	4,275,000
Total Revenues	0	0	0	0	0	0	908,000	3,367,000	4,275,000

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-07 - ASR Expansion Feasibility Study

Project Need: Under the city's aquifer storage and recovery (ASR) limited license, the city has the ability to drill and install up to five ASR wells. Three ASR wells have been drilled since the limited license was obtained in 2000 and serve as the city's back-up, resilient water source. With anticipated population growth and increasing water demand, the city will evaluate if the development of additional ASR wells is feasible.

Project Description: The city's hydrogeologist of record will assist staff in locating potential sites for additional ASR wells. In addition, test wells must be drilled by a qualified driller in order for the hydrogeologist to determine suitability of the well for ASR purposes. Therefore, these studies will include both consultant and drilling services.

Operations and Maintenance Impact: None.

Total Project Cost: \$1,151,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	60,000	0	0	60,000
Total Internal	0	0	0	0	0	60,000	0	0	60,000
External Expenses									
Design and Engineering	0	0	0	0	0	300,000	0	0	300,000
Construction	0	0	0	0	0	682,000	0	0	682,000
Contingency	0	0	0	0	0	109,000	0	0	109,000
Total External	0	0	0	0	0	1,091,000	0	0	1,091,000
Total Project Expense	0	0	0	0	0	1,151,000	0	0	1,151,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	1,151,000	0	0	1,151,000
Total Revenue Funding	0	0	0	0	0	1,151,000	0	0	1,151,000
Total Revenues	0	0	0	0	0	1,151,000	0	0	1,151,000

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-08 - Water Management and Conservation Plan

Project Need: The purpose of a Water Management and Conservation Plan (WMCP) is to serve as a guide for the development and implementation of programs and policies to ensure sustainable use of water resources in the city. The WMCP will provide a description of the water system, identify the water source(s) used, and explain how the city will manage and conserve supplies to meet future demands.

Project Description: Prepare a WMCP that evaluates the management and conservation measures that the city can undertake. The WMCP must consider water that can be saved through conservation practices as a source of supply to meet growing demands if the water saved is less expensive than developing a new supply. The plan represents an integrated resource management approach to securing the city's long-term water supply.

Operations and Maintenance Impact: None.

Total Project Cost: \$103,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	25,000	0	25,000
Total Internal	0	0	0	0	0	0	25,000	0	25,000
External Expenses									
Design and Engineering	0	0	0	0	0	0	70,000	0	70,000
Contingency	0	0	0	0	0	0	8,000	0	8,000
Total External	0	0	0	0	0	0	78,000	0	78,000
Total Project Expense	0	0	0	0	0	0	103,000	0	103,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	0	103,000	0	103,000
Total Revenue Funding	0	0	0	0	0	0	103,000	0	103,000
Total Revenues	0	0	0	0	0	0	103,000	0	103,000

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-09 - Water Master Plan

Project Need: The city conducts water master planning every five to ten years. The current Water Master Plan was adopted in December 2020.

Project Description: The Water Master Plan is a comprehensive study of the city's water source as well as storage and delivery systems and will be used to guide future water utility discussions. The Water Master Plan has a 20-year planning horizon and is predicated on the city's projected population growth during that time.

Operations and Maintenance Impact: None.

Total Project Cost: \$285,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	60,000	0	60,000
Total Internal	0	0	0	0	0	0	60,000	0	60,000
External Expenses									
Design and Engineering	0	0	0	0	0	0	200,000	0	200,000
Contingency	0	0	0	0	0	0	25,000	0	25,000
Total External	0	0	0	0	0	0	225,000	0	225,000
Total Project Expense	0	0	0	0	0	0	285,000	0	285,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	0	285,000	0	285,000
Total Revenue Funding	0	0	0	0	0	0	285,000	0	285,000
Total Revenues	0	0	0	0	0	0	285,000	0	285,000

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-10 - Abandon Canterbury Reservoirs 1-1 and 1-2 and Pump Station 1

Project Need: Certain existing reservoirs and pump stations were identified in the 2020 Master Plan for abandonment due to either having reached the end of their life cycle or limitations that do not allow them to be operated optimally for maximum system efficiency. Due to Canterbury Reservoirs 1-1 and 1-2's age and Pump Station 1's limited flow capacity, all were recommended for abandonment.

Project Description: Properly abandon Canterbury Reservoirs 1-1 and 1-2 and Pump Station 1.

Operations and Maintenance Impact: None. If anything, it will decrease their workload slightly as there will be two fewer pumps to maintain.

Total Project Cost: \$454,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	5	60,000	60,005
Total Internal	0	0	0	0	0	0	5	60,000	60,005
External Expenses									
Design and Engineering	0	0	0	0	0	0	5	70,000	70,005
Construction	0	0	0	0	0	0	5	285,000	285,005
Contingency	0	0	0	0	0	0	5	39,000	39,005
Total External	0	0	0	0	0	0	15	394,000	394,015
Total Project Expense	0	0	0	0	0	0	20	454,000	454,020
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	0	20	454,000	454,020
Total Revenue Funding	0	0	0	0	0	0	20	454,000	454,020
Total Revenues	0	0	0	0	0	0	20	454,000	454,020

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-11 - Abandon Reservoir 4

Project Need: Certain existing reservoirs and pump stations were identified in the 2020 Master Plan for abandonment due to either having reached the end of their life cycle or limitations that do not allow them to be operated optimally for maximum system efficiency. Due to both Reservoir 4's location and age, it was recommended for abandonment.

Project Description: Properly abandon Reservoir 4.

Operations and Maintenance Impact: None.

Total Project Cost: \$178,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	5	30,000	30,005
Total Internal	0	0	0	0	0	0	5	30,000	30,005
External Expenses									
Design and Engineering	0	0	0	0	0	0	5	40,000	40,005
Construction	0	0	0	0	0	0	5	93,000	93,005
Contingency	0	0	0	0	0	0	5	15,000	15,005
Total External	0	0	0	0	0	0	15	148,000	148,015
Total Project Expense	0	0	0	0	0	0	20	178,000	178,020
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	0	20	178,000	178,020
Total Revenue Funding	0	0	0	0	0	0	20	178,000	178,020
Total Revenues	0	0	0	0	0	0	20	178,000	178,020

CAPITAL IMPROVEMENT PLAN - WATER

22CIP-12 - Lake Oswego/Tigard Water Supply Expansion

Project Need: The 2020 Water Master Plan projected that as population increases, Tigard's current supply allotment from the Lake Oswego/Tigard (LOT) water partnership of 14 million gallons per day (MGD) will not be adequate to continue to supply firm capacity to meet projected maximum daily demand (MDD) by 2029. Therefore, system improvements must be complete and fully online by 2029 in order to continue to provide uninterrupted service to customers.

Project Description: System improvements are needed to alleviate hydraulic restraints in the system in order to increase the LOT supply from 14 MGD to 18 MGD. Work will include adding a finished water pump at the LOT water treatment plant (50% cost share with Lake Oswego), installation of approximately 5,600 linear feet of 36-inch diameter pipe from Waluga Reservoir to SW Bangy Road, installation of the sixth pump at Bonita Pump Station 5, and installation of approximately 250 linear feet of 24-inch diameter pipe to cross under Fanno Creek.

Operations and Maintenance Impact: Minor increase in operational costs to maintain new pump at Bonita Pump Station 5.

Total Project Cost: \$6,770,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	150,000	150,000	300,000
Total Internal	0	0	0	0	0	0	150,000	150,000	300,000
External Expenses									
Design and Engineering	0	0	0	0	0	0	693,000	380,000	1,073,000
Construction	0	0	0	0	0	0	5	4,750,000	4,750,005
Contingency	0	0	0	0	0	0	77,000	570,000	647,000
Total External	0	0	0	0	0	0	770,005	5,700,000	6,470,005
Total Project Expense	0	0	0	0	0	0	920,005	5,850,000	6,770,005
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	0	0	0	0	920,000	5,850,000	6,770,000
Total Revenue Funding	0	0	0	0	0	0	920,000	5,850,000	6,770,000
Total Revenues	0	0	0	0	0	0	920,000	5,850,000	6,770,000

CAPITAL IMPROVEMENT PLAN - WATER

96008 - Water Main Line Oversizing Program

Project Need: Upsize water distribution waterlines.

Project Description: Waterlines that are in need of upsizing are identified in the city's Water System Master Plan or identified during private development review. The city may elect to require upsizing of water transmission lines that are greater than 12 inches in diameter in conjunction with new development. Upsized transmission lines can result in more efficient water flow, increased fire flow, and provide for potential future growth. This program provides funding to reimburse developers for the increased cost of larger pipes as well as city upsizing projects.

Operations and Maintenance Impact: Minor impact for adding new water lines to inventory.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	140,000
Total Internal	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	140,000
External Expenses									
Construction	0	240,000	140,000	140,000	140,000	140,000	140,000	140,000	1,080,000
Total External	0	240,000	140,000	140,000	140,000	140,000	140,000	140,000	1,080,000
Total Project Expense	0	260,000	160,000	160,000	160,000	160,000	160,000	160,000	1,220,000
REVENUES									
Revenue Funding Source									
531-Water SDC Fund	0	260,000	160,000	160,000	160,000	160,000	160,000	160,000	1,220,000
Total Revenue Funding	0	260,000	160,000	160,000	160,000	160,000	160,000	160,000	1,220,000
Total Revenues	0	260,000	160,000	160,000	160,000	160,000	160,000	160,000	1,220,000

CAPITAL IMPROVEMENT PLAN - WATER

96030 - Bull Mountain Road Water Pipeline

Project Need: Alleviate a firefighting water deficiency in the city's distribution system. This project has been postponed and in the interim, project #96047 Canterbury Pump Station interim improvements were constructed to provide the necessary fireflow.

Project Description: The project, as identified in the Water Master Plan, connects the 530-foot and the 550-foot pressure zones.

Operations and Maintenance Impact: Minor increase in operations costs for new water line.

Total Project Cost: \$14,543,500

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	145,000	200,000	0	0	345,000
Total Internal	0	0	0	0	145,000	200,000	0	0	345,000
External Expenses									
Design and Engineering	0	0	0	0	762,000	1,852,500	0	0	2,614,500
Construction	0	0	0	0	950,000	7,659,000	0	0	8,609,000
Contingency	0	0	0	0	415,000	2,560,000	0	0	2,975,000
Total External	0	0	0	0	2,127,000	12,071,500	0	0	14,198,500
Total Project Expense	0	0	0	0	2,272,000	12,271,500	0	0	14,543,500

REVENUES

Revenue Funding Source									
530-Water Fund	0	0	0	0	1,477,000	7,977,000	0	0	9,454,000
531-Water SDC Fund	0	0	0	0	795,000	4,294,500	0	0	5,089,500
Total Revenue Funding	0	0	0	0	2,272,000	12,271,500	0	0	14,543,500
Total Revenues	0	0	0	0	2,272,000	12,271,500	0	0	14,543,500

CAPITAL IMPROVEMENT PLAN - WATER

96040 - Cach Reservoir 18 and Pump Station

Project Need: In conjunction with the development of the River Terrace Planning Area and to address storage and pumping deficiencies identified in the River Terrace Updated Water Master Plan, system improvements are required.

Project Description: The project is for the design of a new water reservoir, associated new water lines, and replacement of a temporary pump station for the city's 550-foot service area. The reservoir will be constructed on city property located on the west side of Bull Mountain in the Sunrise Lane vicinity. A new permanent pump station will replace an existing temporary pump station on the Menlor Reservoir site to move water from the 410-foot to the 550-foot service areas. The project will provide additional storage and pumping facilities to address system deficiencies and development demand in River Terrace.

Operations and Maintenance Impact: Significant increase in operation and maintenance for new reservoir and pump station.

Total Project Cost: \$23,487,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	44,850	50,000	150,000	200,000	100,000	0	0	0	544,850
Total Internal	44,850	50,000	150,000	200,000	100,000	0	0	0	544,850
External Expenses									
Design and Engineering	1,650	430,000	1,700,000	1,545,000	590,000	0	0	0	4,266,650
Construction	0	0	3,106,000	10,140,000	1,500,000	0	0	0	14,746,000
Environmental Permit Compliance	0	0	0	4,500	0	0	0	0	4,500
Contingency	0	0	1,550,000	1,500,000	875,000	0	0	0	3,925,000
Total External	1,650	430,000	6,356,000	13,189,500	2,965,000	0	0	0	22,942,150
Total Project Expense	46,500	480,000	6,506,000	13,389,500	3,065,000	0	0	0	23,487,000
REVENUES									
Revenue Funding Source									
530-Water Fund	38,000	250,000	3,383,000	6,963,000	1,594,000	0	0	0	12,228,000
531-Water SDC Fund	8,500	230,000	3,123,000	6,426,500	1,471,000	0	0	0	11,259,000
Total Revenue Funding	46,500	480,000	6,506,000	13,389,500	3,065,000	0	0	0	23,487,000
Total Revenues	46,500	480,000	6,506,000	13,389,500	3,065,000	0	0	0	23,487,000

CAPITAL IMPROVEMENT PLAN - WATER

96046 - Red Rock Creek Waterline Relocation

Project Need: This project will be constructed with the Wall Street / Tech Center Drive connection project and will provide domestic and fire services to properties served by the existing waterline currently located in Red Rock Creek.

Project Description: Abandon the existing 12-inch waterline running parallel to Red Rock Creek in place and connect the dead-end waterlines in Wall Street and Tech Center Drive to create a system loop. In doing so, this will delete a waterline railroad crossing. Connect the existing 12-inch waterline to Milton Court and to the existing 12-inch waterline in Tech Center Drive, which will add a waterline railroad crossing.

Operations and Maintenance Impact: None.

Total Project Cost: \$854,500

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	134,500	25,000	25,000	0	0	0	0	0	184,500
Total Internal	134,500	25,000	25,000	0	0	0	0	0	184,500
External Expenses									
Design and Engineering	135,000	30,000	65,000	0	0	0	0	0	230,000
Construction	0	113,000	247,000	0	0	0	0	0	360,000
Contingency	0	20,000	60,000	0	0	0	0	0	80,000
Total External	135,000	163,000	372,000	0	0	0	0	0	670,000
Total Project Expense	269,500	188,000	397,000	0	0	0	0	0	854,500
REVENUES									
Revenue Funding Source									
530-Water Fund	269,500	188,000	397,000	0	0	0	0	0	854,500
Total Revenue Funding	269,500	188,000	397,000	0	0	0	0	0	854,500
Total Revenues	269,500	188,000	397,000	0	0	0	0	0	854,500

CAPITAL IMPROVEMENT PLAN - WATER

96049 - Willamette Intake Facility Expansion

Project Need: Future access to regional water supply source water, the Willamette River, using water rights granted to the City of Tigard. This water source may be needed to serve the Tigard Water Service Area due to an increase in water demand by future customers or supplemental or emergency water supply for resiliency over a 50-year planning horizon.

Project Description: Tigard's share of design, permitting and construction of a regional raw water intake structure is a critical component for future conveyance and treatment of Willamette River source water. Tigard is partnering with Tualatin Valley Water District, City of Hillsboro, City of Beaverton, City of Sherwood, and City of Wilsonville in this project package identified as the Willamette Intake Facility Project. The managing authority for this project is Tualatin Valley Water District.

Operations and Maintenance Impact: May require future funds contribution to partners for maintenance.

Total Project Cost: \$3,003,400

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	400	0	0	0	0	0	0	0	400
Total Internal	400	0	0	0	0	0	0	0	400
External Expenses									
Design and Engineering	1,154,000	910,000	724,000	0	0	0	0	0	2,788,000
Contingency	0	130,000	85,000	0	0	0	0	0	215,000
Total External	1,154,000	1,040,000	809,000	0	0	0	0	0	3,003,000
Total Project Expense	1,154,400	1,040,000	809,000	0	0	0	0	0	3,003,400
REVENUES									
Revenue Funding Source									
531-Water SDC Fund	1,154,400	1,040,000	809,000	0	0	0	0	0	3,003,400
Total Revenue Funding	1,154,400	1,040,000	809,000	0	0	0	0	0	3,003,400
Total Revenues	1,154,400	1,040,000	809,000	0	0	0	0	0	3,003,400

CAPITAL IMPROVEMENT PLAN - WATER

96050 - Fonner Street / 121st Avenue Valve and Piping Improvements

Project Need: Based on current and future population growth on the western edge of the Tigard Water Service Area (River Terrace), the existing water distribution system will not be able to efficiently supply water to this area. This project was identified during the planning stage of the Lake Oswego/Tigard Water Partnership.

Project Description: The project includes the design and construction of a pressure-reducing valve, approximately 900 feet of pipe, and associated appurtenances. This project will be constructed as part of the 121st Avenue Improvement project CIP #95050.

Operations and Maintenance Impact: Minimal impact.

Total Project Cost: \$1,538,500

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	38,000	30,000	30,000	30,000	0	0	0	0	128,000
Total Internal	38,000	30,000	30,000	30,000	0	0	0	0	128,000
External Expenses									
Design and Engineering	60,500	100,000	30,000	30,000	0	0	0	0	220,500
Construction	0	0	520,000	520,000	0	0	0	0	1,040,000
Contingency	0	0	75,000	75,000	0	0	0	0	150,000
Total External	60,500	100,000	625,000	625,000	0	0	0	0	1,410,500
Total Project Expense	98,500	130,000	655,000	655,000	0	0	0	0	1,538,500
REVENUES									
Revenue Funding Source									
530-Water Fund	67,000	78,000	393,000	393,000	0	0	0	0	931,000
531-Water SDC Fund	31,500	52,000	262,000	262,000	0	0	0	0	607,500
Total Revenue Funding	98,500	130,000	655,000	655,000	0	0	0	0	1,538,500
Total Revenues	98,500	130,000	655,000	655,000	0	0	0	0	1,538,500

CAPITAL IMPROVEMENT PLAN - WATER

96052 - Fifth Pump at the River Intake Pump Station (RIPS)

Project Need: Increase River Intake Pump Station efficiency pumping capacity.

Project Description: Add a fifth 400-horsepower pump at the River Intake Pump Station.

Project Funding: The City of Lake Oswego is managing the project. The City of Tigard will reimburse the City of Lake Oswego per the Lake Oswego/Tigard Intergovernmental Agreement.

Operations and Maintenance Impact: Minor impact to operations cost of the water intake system which will be handled through the existing intergovernmental agreement with Lake Oswego.

Total Project Cost: \$850,000

City of Tigard Project Cost: \$420,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	5,000	5,000	0	0	0	0	0	10,000
Total Internal	0	5,000	5,000	0	0	0	0	0	10,000
External Expenses									
Design and Engineering	0	25,000	0	0	0	0	0	0	25,000
Construction	0	200,000	155,000	0	0	0	0	0	355,000
Contingency	0	20,000	10,000	0	0	0	0	0	30,000
Total External	0	245,000	165,000	0	0	0	0	0	410,000
Total Project Expense	0	250,000	170,000	0	0	0	0	0	420,000
REVENUES									
Revenue Funding Source									
531-Water SDC Fund	0	250,000	170,000	0	0	0	0	0	420,000
Total Revenue Funding	0	250,000	170,000	0	0	0	0	0	420,000
Total Revenues	0	250,000	170,000	0	0	0	0	0	420,000

CAPITAL IMPROVEMENT PLAN - WATER

96053 - Aquifer Storage and Recovery Well #2 and Well #3

Project Need: The Water System Master Plan has identified the need to expand the city's Aquifer Storage and Recovery program to meet its long-term water demands.

Project Description: The city's Aquifer Storage and Recovery (ASR) program began in 2001 with the drilling of ASR 1. In 2006, the city completed the construction of the ASR 2 facility and in 2007 the city drilled and tested ASR 3. This project has three phases: (1) construction of new facilities to make ASR Well 3 operational; (2) replacement of electrical devices with easier-to-maintain components to existing ASR 2 facilities; and, (3) connection of two pressure zones to improve storage and distribution from ASR 3.

Operations and Maintenance Impact: Operations staff will be able to manage summer peak demands more efficiently in the future.

Total Project Cost: \$6,490,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	40,000	60,000	40,000	0	0	0	0	0	140,000
Total Internal	40,000	60,000	40,000	0	0	0	0	0	140,000
External Expenses									
Design and Engineering	110,000	526,000	689,000	0	0	0	0	0	1,325,000
Construction	0	1,100,000	3,400,000	0	0	0	0	0	4,500,000
Contingency	0	100,000	425,000	0	0	0	0	0	525,000
Total External	110,000	1,726,000	4,514,000	0	0	0	0	0	6,350,000
Total Project Expense	150,000	1,786,000	4,554,000	0	0	0	0	0	6,490,000
REVENUES									
Revenue Funding Source									
530-Water Fund	45,000	536,000	1,366,000	0	0	0	0	0	1,947,000
531-Water SDC Fund	105,000	1,250,000	3,188,000	0	0	0	0	0	4,543,000
Total Revenue Funding	150,000	1,786,000	4,554,000	0	0	0	0	0	6,490,000
Total Revenues	150,000	1,786,000	4,554,000	0	0	0	0	0	6,490,000

CAPITAL IMPROVEMENT PLAN - WATER

96056 - Water System Development Charge (SDC) Study

Project Need: For accounting purposes, it is much easier to run an SDC study which supports the Capital Improvement Plan out of a system capital fund rather than an operations fund. As there is no division in water SDC, it would have to either go to the water division or to water capital.

Project Description: The Water System Development Charges (SDCs) was last updated in 2010. The SDC methodology needs to be updated to include water master planning information provided in 2014, 2018 and 2021. The study will review the capital improvement requirements to meet current and future growth development needs and review the current water SDC charges.

Operations and Maintenance Impact: None.

Total Project Cost: \$40,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Design and Engineering	0	15,000	25,000	0	0	0	0	0	40,000
Total External	0	15,000	25,000	0	0	0	0	0	40,000
Total Project Expense	0	15,000	25,000	0	0	0	0	0	40,000
REVENUES									
Revenue Funding Source									
531-Water SDC Fund	0	15,000	25,000	0	0	0	0	0	40,000
Total Revenue Funding	0	15,000	25,000	0	0	0	0	0	40,000
Total Revenues	0	15,000	25,000	0	0	0	0	0	40,000

CAPITAL IMPROVEMENT PLAN - WATER

96057 - Abandon Baylor Reservoirs 9-1 and 9-2 and Hunziker Pump Station 11

Project Need: Certain existing reservoirs and pump stations were identified in the 2020 Water Master Plan for abandonment due to either having reached the end of their life cycle or limitations that do not allow them to be operated optimally for maximum system efficiency. Due to Baylor Reservoirs 9-1 and 9-2's location, and Hunziker Pump Station 11's limited use (only needed when draining Reservoirs 9-1 and 9-2), all were recommended for abandonment.

Project Description: Properly abandon Baylor Reservoirs 9-1 and 9-2 and Hunziker Pump Station 11.

Operations and Maintenance Impact: None. If anything, it will decrease workload slightly as there will be one fewer pump to maintain.

Total Project Cost: \$389,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	30,000	0	0	0	0	0	30,000
Total Internal	0	0	30,000	0	0	0	0	0	30,000
External Expenses									
Design and Engineering	0	0	73,000	0	0	0	0	0	73,000
Construction	0	0	250,000	0	0	0	0	0	250,000
Contingency	0	0	36,000	0	0	0	0	0	36,000
Total External	0	0	359,000	0	0	0	0	0	359,000
Total Project Expense	0	0	389,000	0	0	0	0	0	389,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	389,000	0	0	0	0	0	389,000
Total Revenue Funding	0	0	389,000	0	0	0	0	0	389,000
Total Revenues	0	0	389,000	0	0	0	0	0	389,000

CAPITAL IMPROVEMENT PLAN - WATER

96058 - Pipeline Renewal and Replacement Program

Project Need: The city's water distribution system is comprised of approximately 260 miles of pipe, of which approximately 25 percent is cast iron that can be at risk of leaks and breaks. The city does not currently have a robust pipeline renewal and replacement program, and failure to proactively replace aging pipe can have catastrophic financial implications. The 2020 Water Master Plan recommended that the city address all distribution system pipes within a 100-year timeframe. The first year of the program will be used as a planning and design phase, followed by two years of replacing one to two miles of pipe per year. By FY 2025, it is anticipated that the city will have built up the resources and efficiencies needed to replace three miles of pipe per year.

Project Description: Establish a pipeline renewal and replacement program for the city where the end result is replacing three miles of pipe annually. At times, funds may be transferred from this program to individual capital projects to leverage opportunities to replace water lines within other projects such as major street improvements.

Operations and Maintenance Impact: Increase in impact during annual construction activities, however the program will result in a net decrease in impact as older, leak-prone water lines are replaced.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Total Internal	0	0	100,000	100,000	100,000	100,000	100,000	100,000	600,000
External Expenses									
Design and Engineering	0	0	900,000	250,000	719,000	793,000	943,000	1,125,000	4,730,000
Construction	0	0	0	736,000	2,500,000	1,344,000	2,262,000	4,480,000	11,322,000
Contingency	0	0	100,000	108,000	358,000	451,000	493,000	623,000	2,133,000
Total External	0	0	1,000,000	1,094,000	3,577,000	2,588,000	3,698,000	6,228,000	18,185,000
Total Project Expense	0	0	1,100,000	1,194,000	3,677,000	2,688,000	3,798,000	6,328,000	18,785,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	1,100,000	1,194,000	3,677,000	2,688,000	3,798,000	6,328,000	18,785,000
Total Revenue Funding	0	0	1,100,000	1,194,000	3,677,000	2,688,000	3,798,000	6,328,000	18,785,000
Total Revenues	0	0	1,100,000	1,194,000	3,677,000	2,688,000	3,798,000	6,328,000	18,785,000

CAPITAL IMPROVEMENT PLAN - WATER

96059 - Water System Major Maintenance Program

Project Need: Provide major maintenance and rehabilitation of water system and firefighting capacity elements that are aging and in need of significant repair.

Project Description: This program is used for urgent projects to renew, repair, or replace elements of the water system that have failed or are near failure.

Operations and Maintenance Impact: None. Reduces risk of future water line breaks.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	30,000	30,000	30,000	30,000	30,000	30,000	180,000
Total Internal	0	0	30,000	30,000	30,000	30,000	30,000	30,000	180,000
External Expenses									
Construction	0	0	120,000	120,000	120,000	120,000	120,000	120,000	720,000
Total External	0	0	120,000	120,000	120,000	120,000	120,000	120,000	720,000
Total Project Expense	0	0	150,000	150,000	150,000	150,000	150,000	150,000	900,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	150,000	150,000	150,000	150,000	150,000	150,000	900,000
Total Revenue Funding	0	0	150,000	150,000	150,000	150,000	150,000	150,000	900,000
Total Revenues	0	0	150,000	150,000	150,000	150,000	150,000	150,000	900,000

CAPITAL IMPROVEMENT PLAN - WATER

96060 - Generator Replacement at Canterbury Pump Station

Project Need: The current generator is approximately 35 years old. Because of its age, replacement parts are hard to find and maintenance costs are increasing.

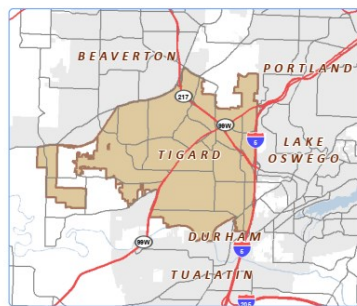
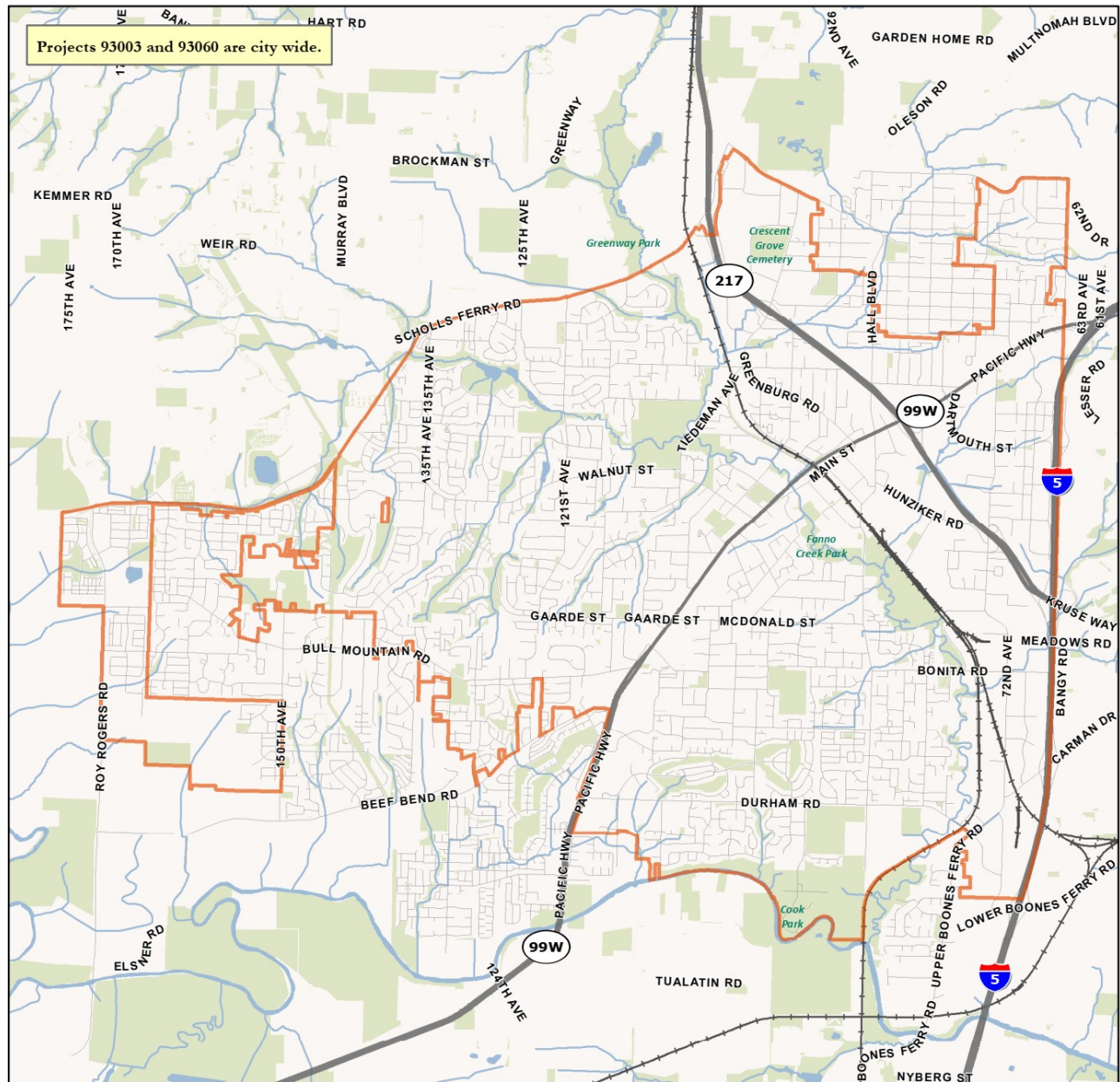
Project Description: Replace the generator with a new model, which would enhance reliability and stability of reservoir's service to the public.

Operations and Maintenance Impact: Enhanced reliability and stability should reduce maintenance cost over time.

Total Project Cost: \$200,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Construction	0	0	200,000	0	0	0	0	0	200,000
Total External	0	0	200,000	0	0	0	0	0	200,000
Total Project Expense	0	0	200,000	0	0	0	0	0	200,000
REVENUES									
Revenue Funding Source									
530-Water Fund	0	0	200,000	0	0	0	0	0	200,000
Total Revenue Funding	0	0	200,000	0	0	0	0	0	200,000
Total Revenues	0	0	200,000	0	0	0	0	0	200,000

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER



The City of Tigard Project Locations

 Tigard City Limits



0 0.5 1 Miles



City of Tigard Recommended Capital Improvement Plan FY 2022-27

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

Project No.	Project Name	YTD 2021	2022	2023	2024	2025	2026	2027	Projected Total
93003	Sanitary Sewer Major Maintenance Program	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
93060	Sanitary Sewer Master Plan Update	0	0	130,000	0	0	0	0	130,000
Total Funded		100,000	100,000	230,000	100,000	100,000	100,000	100,000	830,000

93003 - Sanitary Sewer Major Maintenance Program

Project Need: Provide major maintenance of the sanitary sewer system.

Project Description: This program is used for urgent projects to renew, repair, or replace sections of the sanitary sewer system that have failed or are near failure. Normal operations and maintenance includes work on the system to keep it functioning; however, this does not result in renewing or replacing the pipe or other appurtenances. Projects included in the Major Maintenance Program exceed normal maintenance and operations and typically replace pipe and add a renewed service life.

Operations and Maintenance Impact: None.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	15,000	15,000	15,000	15,000	15,000	15,000	15,000	105,000
Total Internal	0	15,000	15,000	15,000	15,000	15,000	15,000	15,000	105,000
External Expenses									
Project Estimate	0	85,000	85,000	85,000	85,000	85,000	85,000	85,000	595,000
Total External	0	85,000	85,000	85,000	85,000	85,000	85,000	85,000	595,000
Total Project Expense	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total Revenue Funding	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000
Total Revenues	0	100,000	100,000	100,000	100,000	100,000	100,000	100,000	700,000

CAPITAL IMPROVEMENT PLAN - SANITARY SEWER

93060 - Sanitary Sewer Master Plan Update

Project Need: The most recent Sanitary Sewer Master Plan was completed in 2010. The highest-priority capacity projects have been completed or are scheduled. The existing master plan did not address the structural deficiencies and replacement/upgrade needs of an aging system.

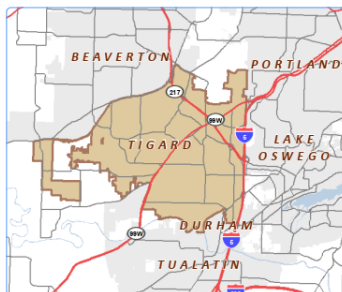
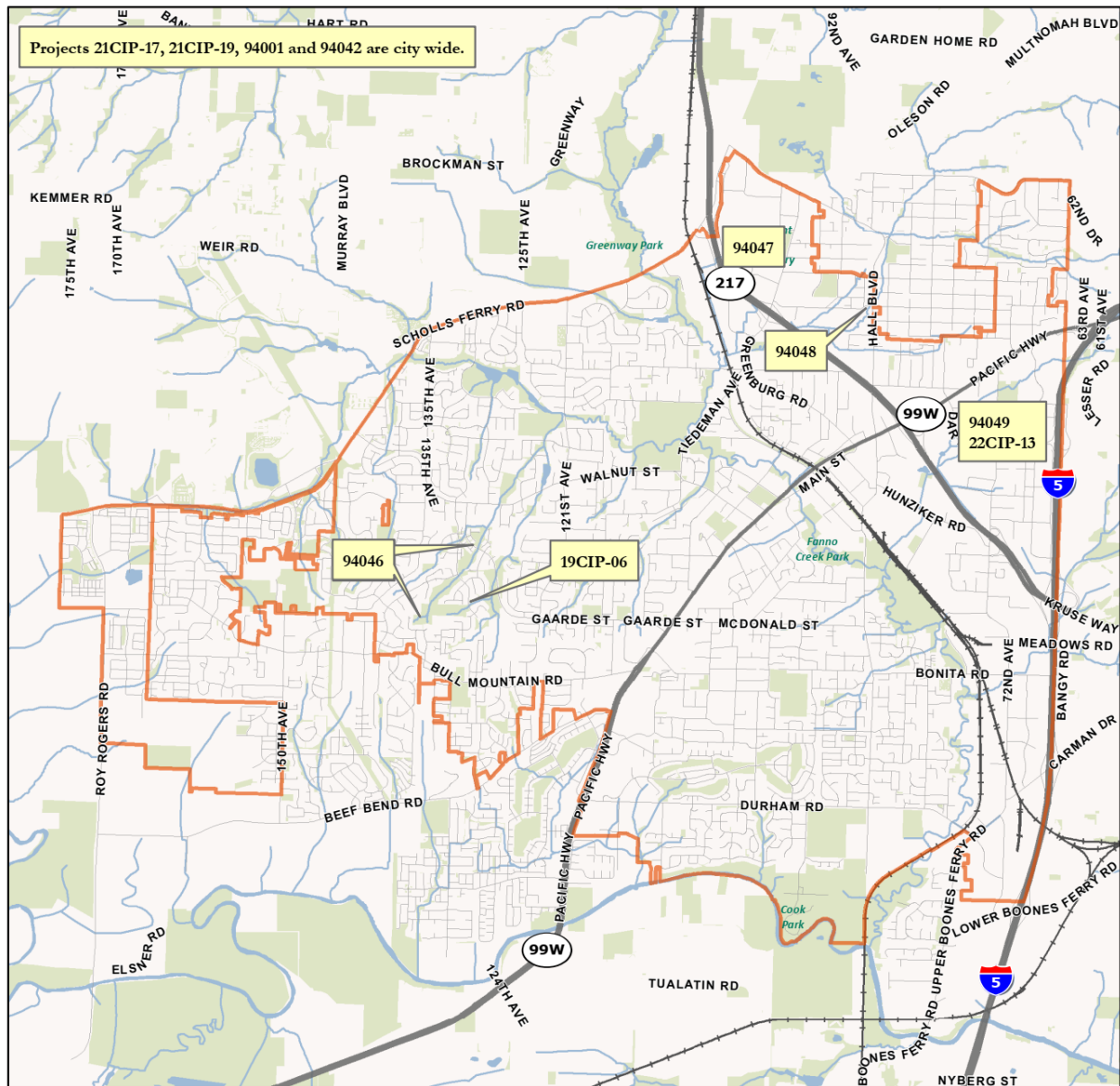
Project Description: A Sanitary Sewer Master Plan Update will be prepared with a primary focus on existing system conditions. The plan will assess, prioritize, and provide budget-level cost estimates for existing and projected future pipe system capital repair and replacement needs. This project is now scheduled for implementation after the Public Works Department completes the purchase and installation of a new Asset Management System that can provide needed system conditions reporting.

Operations and Maintenance Impact: None.

Total Project Cost: \$130,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	20,000	0	0	0	0	20,000
Total Internal	0	0	0	20,000	0	0	0	0	20,000
External Expenses									
Design and Engineering	0	0	0	100,000	0	0	0	0	100,000
Contingency	0	0	0	10,000	0	0	0	0	10,000
Total External	0	0	0	110,000	0	0	0	0	110,000
Total Project Expense	0	0	0	130,000	0	0	0	0	130,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	0	130,000	0	0	0	0	130,000
Total Revenue Funding	0	0	0	130,000	0	0	0	0	130,000
Total Revenues	0	0	0	130,000	0	0	0	0	130,000

CAPITAL IMPROVEMENT PLAN - STORMWATER



**The City of Tigard
Project Locations**

□ Tigard City Limits



0 2.5 5 Miles



City of Tigard Recommended Capital Improvement Plan FY 2022-27

CAPITAL IMPROVEMENT PLAN - STORMWATER

Project No.	Project Name	YTD 2021	2022	2023	2024	2025	2026	2027	Projected Total
19CIP-06	Gaarde Street Greenway Detention and Sewer Project	0	0	100,000	200,000	0	0	0	300,000
21CIP-17	Detention Pipe Retrofit Study and Pilot Project	0	0	0	0	115,000	140,000	140,000	395,000
21CIP-19	Stormwater Master Plan Update	0	0	150,000	150,000	0	0	0	300,000
22CIP-13	Red Rock Creek Stabilization and Enhancement - Future Locations	0	0	0	0	0	1,195,500	1,195,500	2,391,000
94001	Storm Drainage Major Maintenance Program	350,000	350,000	400,000	400,000	400,000	400,000	400,000	2,700,000
94042	Water Quality Facility Rehabilitation Program	62,500	62,500	68,000	68,000	68,000	68,000	68,000	465,000
94046	Kruger Creek Stabilization	280,000	3,600,000	1,800,000	0	0	0	0	5,680,000
94047	Washington Square Area Retrofit Plan	0	100,000	0	0	0	0	0	100,000
94048	Oak Street Property Acquisition	355,000	90,000	0	0	0	0	0	445,000
94049	Red Rock Creek Stabilization and Enhancement	0	575,000	850,000	1,875,000	1,575,000	125,000	0	5,000,000
Total Funded		1,047,500	4,777,500	3,368,000	2,693,000	2,158,000	1,928,500	1,803,500	17,776,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

19CIP-06 - Gaarde Street Greenway Detention and Sewer Project

Project Need: Eroded soils, undetained and untreated storm flows in the headwaters of the west fork of Kruger Creek on Bull Mountain are impacting a culvert, causing flooding of a trail, and threatening a sewer line.

Project Description: The project adds a flow control manhole, larger culvert, retaining walls, and outfall scour protection resulting in protection of the trail and sanitary sewer line during peak flows. This is project 310 from the Stormwater Master Plan.

Operations and Maintenance Impact: Minor increase in maintenance for new flow control manhole.

Total Project Cost: \$300,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	20,000	20,000	0	0	0	40,000
Total Internal	0	0	0	20,000	20,000	0	0	0	40,000
External Expenses									
Design and Engineering	0	0	0	50,000	40,000	0	0	0	90,000
Construction	0	0	0	0	100,000	0	0	0	100,000
Environmental Permit Compliance	0	0	0	15,000	0	0	0	0	15,000
Contingency	0	0	0	15,000	40,000	0	0	0	55,000
Total External	0	0	0	80,000	180,000	0	0	0	260,000
Total Project Expense	0	0	0	100,000	200,000	0	0	0	300,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	0	50,000	100,000	0	0	0	150,000
510-Stormwater Fund	0	0	0	50,000	100,000	0	0	0	150,000
Total Revenue Funding	0	0	0	100,000	200,000	0	0	0	300,000
Total Revenues	0	0	0	100,000	200,000	0	0	0	300,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

21CIP-17 - Detention Pipe Retrofit Study and Pilot Project

Project Need: The city owns multiple underground stormwater detention pipes that are aging and difficult or impossible to access and maintain. Clean Water Services has mandated that the city regularly inspect, clean, and maintain these facilities.

Project Description: This project was identified in the 2018 Stormwater Master Plan and will extend over approximately six years. The first element will be the assessment of eight critical detention pipes that cannot be maintained due to access issues and design and construct solutions that may include new water quality elements as well. The subsequent project work will include assessment, design, and construction of retrofits to the remaining detention pipes to ease access and maintenance and if appropriate add water quality features.

Operations and Maintenance Impact: None, and the project will increase the ability to access and maintain existing facilities.

Total Project Cost: \$815,000 (includes costs beyond FY 2026-27)

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	15,000	20,000	20,000	55,000
Total Internal	0	0	0	0	0	15,000	20,000	20,000	55,000
External Expenses									
Design and Engineering	0	0	0	0	0	100,000	0	0	100,000
Construction	0	0	0	0	0	0	120,000	120,000	240,000
Total External	0	0	0	0	0	100,000	120,000	120,000	340,000
Total Project Expense	0	0	0	0	0	115,000	140,000	140,000	395,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	0	0	0	0	115,000	140,000	140,000	395,000
Total Revenue Funding	0	0	0	0	0	115,000	140,000	140,000	395,000
Total Revenues	0	0	0	0	0	115,000	140,000	140,000	395,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

21CIP-19 - Stormwater Master Plan Update

Project Need: Utility master plans should be updated regularly, on an approximate five-year schedule. The last Stormwater Master Plan was completed and adopted in February 2018. Prior to the 2018 master plan, the city did not have a Stormwater Master Plan in place. The 2018 planning effort could not cover all stormwater systems and needs with the time and funding available. Also new requirements for stormwater detention were adopted by Clean Water Services in 2019 that should be accounted for in the city's plans.

Project Description: This master plan update will focus on systems not included or fully analyzed in the 2018 master plan. The plan will focus on pipe and culvert systems conditions and needs, as well as system retrofit opportunities that may add water quality or detention capacity. The master plan update can also incorporate the stormwater results of concept and community planning for South and West River Terrace urban expansion areas.

Operations and Maintenance Impact: None for the plan.

Total Project Cost: \$300,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	20,000	20,000	0	0	0	40,000
Total Internal	0	0	0	20,000	20,000	0	0	0	40,000
External Expenses									
Design and Engineering	0	0	0	100,000	100,000	0	0	0	200,000
Contingency	0	0	0	30,000	30,000	0	0	0	60,000
Total External	0	0	0	130,000	130,000	0	0	0	260,000
Total Project Expense	0	0	0	150,000	150,000	0	0	0	300,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	0	0	150,000	150,000	0	0	0	300,000
Total Revenue Funding	0	0	0	150,000	150,000	0	0	0	300,000
Total Revenues	0	0	0	150,000	150,000	0	0	0	300,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

22CIP-13 - Red Rock Creek Stabilization and Enhancement - Future Locations

Project Need: Red Rock Creek is experiencing severe erosion in the Tigard Triangle area. This has exposed the sanitary sewer line and caused line breaks in the past, for which temporary repairs were made. Eroded sediments have also settled in areas from just upstream of SW Dartmouth, downstream to the confluence with Fanno Creek, causing degradation of wetlands and some localized flooding. Future development in the Tigard Triangle and Hunziker area will add to stormwater runoff and contribute to the creek's problems.

Project Description: Based on recommendations from the 2018 Stormwater Master Plan, and results of the Tigard Triangle Stormwater Implementation Plan (CIP #94044), this project is a placeholder for design and construction of needed streambank, floodplain, and culvert improvements for Red Rock Creek upstream of SW 72nd Avenue and downstream of SW Dartmouth to the confluence with Fanno Creek. (The creek section between SW 72nd Avenue and SW Dartmouth will be stabilized and enhanced in the separately scheduled CIP project #94049.) This project represents multiple projects initially identified in the Stormwater Master Plan (projects 503, 504, 505, and the remainder of project 501 not already addressed with CIP Project #94049). The projects will also be designed to accommodate as possible a future Red Rock Creek Trail. This work and budget may be divided out into two or three individual CIP projects in the future.

Operations and Maintenance Impact: Will add significant vegetated green infrastructure for maintenance but will reduce sanitary sewer maintenance and repairs.

Total Project Cost: \$9,000,000 (includes costs beyond FY 2026-27)

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	0	0	0	0	88,000	88,000	176,000
Total Internal	0	0	0	0	0	0	88,000	88,000	176,000
External Expenses									
Land/Right of Way Acquisition	0	0	0	0	0	0	23,500	23,500	47,000
Design and Engineering	0	0	0	0	0	0	163,000	163,000	326,000
Construction	0	0	0	0	0	0	498,000	498,000	996,000
Environmental Permit Compliance	0	0	0	0	0	0	90,000	90,000	180,000
Contingency	0	0	0	0	0	0	333,000	333,000	666,000
Total External	0	0	0	0	0	0	1,107,500	1,107,500	2,215,000
Total Project Expense	0	0	0	0	0	0	1,195,500	1,195,500	2,391,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	0	0	0	0	597,750	477,500	1,075,250
510-Stormwater Fund	0	0	0	0	0	0	597,750	718,000	1,315,750
Total Revenue Funding	0	0	0	0	0	0	1,195,500	1,195,500	2,391,000
Total Revenues	0	0	0	0	0	0	1,195,500	1,195,500	2,391,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94001 - Storm Drainage Major Maintenance Program

Project Need: Provide major maintenance and rehabilitation of stormwater system elements that are aging and in need of significant repair.

Project Description: This program is used for urgent projects to renew, repair, or replace sections of the stormwater system that have failed or are near failure, including pipes, culverts, and stream sections. Normal operations and maintenance includes work on the system to keep it functioning; however, this does not result in renewing or replacing the pipe or other appurtenances. Projects included in the Storm Drainage Major Maintenance Program exceed normal maintenance and operations because they typically replace facilities and add a renewed service life. This program budget was increased starting in FY 2018-19 to provide for implementation of a culvert condition assessment and ongoing major maintenance culvert repairs as recommended in the Stormwater Master Plan.

Operations and Maintenance Impact: None or may slightly reduce current maintenance costs of storm/stream system problem areas.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	350,000
Total Internal	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	350,000
External Expenses									
Construction	0	300,000	300,000	350,000	350,000	350,000	350,000	350,000	2,350,000
Total External	0	300,000	300,000	350,000	350,000	350,000	350,000	350,000	2,350,000
Total Project Expense	0	350,000	350,000	400,000	400,000	400,000	400,000	400,000	2,700,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	350,000	350,000	400,000	400,000	400,000	400,000	400,000	2,700,000
Total Revenue Funding	0	350,000	350,000	400,000	400,000	400,000	400,000	400,000	2,700,000
Total Revenues	0	350,000	350,000	400,000	400,000	400,000	400,000	400,000	2,700,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94042 - Water Quality Facility Rehabilitation Program

Project Need: The City of Tigard currently maintains approximately 170 public water quality treatment facilities. Approximately 35% to 50% of them have reached an age where significant work is needed to re-establish effective stormwater treatment. Problems vary by facility but include: (1) significant silt build up; (2) overgrown vegetation; (3) facilities that need replanting; and, (4) facilities that have lost function from erosion, burrowing rodents, structural damage, and other factors.

Project Description: Develop and implement a rehabilitation plan for aging City of Tigard stormwater quality facilities. In FY 2019-20, professional services produced a plan assessing the current state of public water quality facilities, identifying needed repairs, and prioritizing the list of repairs. Facilities requiring more than \$50,000 for construction or repair may be transferred to the Capital Improvement Plan (CIP) for rating and ranking. Other repairs will be completed in future years under this program.

Operations and Maintenance Impact: Ultimately this work will reduce the regular, ongoing maintenance needs at many water quality facilities; however, there is much work to do to get facilities in optimal condition.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	7,500	7,500	8,000	8,000	8,000	8,000	8,000	55,000
Total Internal	0	7,500	7,500	8,000	8,000	8,000	8,000	8,000	55,000
External Expenses									
Design and Engineering	0	0	0	0	0	0	0	0	0
Construction	0	55,000	55,000	60,000	60,000	60,000	60,000	60,000	410,000
Total External	0	55,000	55,000	60,000	60,000	60,000	60,000	60,000	410,000
Total Project Expense	0	62,500	62,500	68,000	68,000	68,000	68,000	68,000	465,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	62,500	62,500	68,000	68,000	68,000	68,000	68,000	465,000
Total Revenue Funding	0	62,500	62,500	68,000	68,000	68,000	68,000	68,000	465,000
Total Revenues	0	62,500	62,500	68,000	68,000	68,000	68,000	68,000	465,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94046 - Kruger Creek Stabilization

Project Need: Kruger Creek is experiencing severe erosion in the Bull Mountain area. This erosion is threatening slope stability and the safety of sanitary, storm, park, and private infrastructure located near the creek. The extreme quantities of silt and mud from erosion are also causing problems downstream, depositing in lower creek areas, covering trails, and impacting important infrastructure.

Project Description: Based on recommendations from the Stormwater Master Plan and results of the Kruger Creek Pre-Design project, this will provide for design, permitting and construction of needed stream improvements. This project implements two high-priority projects in the Stormwater Master Plan (projects 304 and 308), addressing eroding stretches of Kruger Creek from the headwaters near Bull Mountain Park to Gaarde Street.

Operations and Maintenance Impact: Will add large, long new pipe system requiring inspection and maintenance. Will significantly reduce risk of erosion and landslides and impacts to culverts and sanitary sewer line.

Total Project Cost: \$5,680,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	55,000	125,000	100,000	0	0	0	0	280,000
Total Internal	0	55,000	125,000	100,000	0	0	0	0	280,000
External Expenses									
Design and Engineering	0	175,000	275,000	150,000	0	0	0	0	600,000
Construction	0	0	2,300,000	1,000,000	0	0	0	0	3,300,000
Environmental Permit Compliance	0	0	100,000	50,000	0	0	0	0	150,000
Contingency	0	50,000	800,000	500,000	0	0	0	0	1,350,000
Total External	0	225,000	3,475,000	1,700,000	0	0	0	0	5,400,000
Total Project Expense	0	280,000	3,600,000	1,800,000	0	0	0	0	5,680,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	92,400	1,188,000	595,000	0	0	0	0	1,875,400
510-Stormwater Fund	0	187,600	2,412,000	1,205,000	0	0	0	0	3,804,600
Total Revenue Funding	0	280,000	3,600,000	1,800,000	0	0	0	0	5,680,000
Total Revenues	0	280,000	3,600,000	1,800,000	0	0	0	0	5,680,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94047 - Washington Square Area Retrofit Plan

Project Need: The Washington Square area has an extensive impervious area, contributing runoff and pollutants to Ash and Fanno Creeks. This area was primarily constructed in the era before stormwater quality and quantity facilities were required. Ash Creek in this area exhibits issues including erosion, siltation, and flooding.

Project Description: This project will develop a retrofit plan that could be implemented as upgrades and redevelopment occurs to Washington Square and adjacent areas. The planning effort will involve property owners, ODOT, and Clean Water Services. The planning effort will examine opportunities to reduce runoff volume, velocity and pollutants entering the creek, including concepts of detention, de-paving, stormwater re-use, and vegetated stormwater features. The plan would provide a mechanism to guide stormwater regulations in this area for projects applying to the city for development permits and define capital projects for city or public-private implementation. This plan will complement the Washington Square Regional Center planning efforts.

Operations and Maintenance Impact: None for the plan.

Total Project Cost: \$100,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	15,000	0	0	0	0	0	15,000
Total Internal	0	0	15,000	0	0	0	0	0	15,000
External Expenses									
Design and Engineering	0	0	75,000	0	0	0	0	0	75,000
Contingency	0	0	10,000	0	0	0	0	0	10,000
Total External	0	0	85,000	0	0	0	0	0	85,000
Total Project Expense	0	0	100,000	0	0	0	0	0	100,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	0	100,000	0	0	0	0	0	100,000
Total Revenue Funding	0	0	100,000	0	0	0	0	0	100,000
Total Revenues	0	0	100,000	0	0	0	0	0	100,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94048 - Oak Street Property Acquisition

Project Need: The acquisition of this property is identified in the City's Stormwater Master Plan (Project ID: CIP 106). The home that sits on the property is dangerously close to Ash Creek and the streambank adjacent to the house has been eroding. Additional floodplain storage is needed at this location to slow runoff from upstream development and help reduce downstream erosion.

Project Description: The project will include the demolition of the existing house and provide native planting at the property. Future work (separate CIP) will include restoration and excavation within the floodplain to add more floodplain storage.

Operations and Maintenance Impact: Native planting at the property will require minimal ongoing maintenance.

Total Project Cost: \$445,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	25,000	10,000	0	0	0	0	0	35,000
Total Internal	0	25,000	10,000	0	0	0	0	0	35,000
External Expenses									
Land/Right of Way Acquisition	0	284,000	0	0	0	0	0	0	284,000
Design and Engineering	0	46,000	0	0	0	0	0	0	46,000
Construction	0	0	70,000	0	0	0	0	0	70,000
Contingency	0	0	10,000	0	0	0	0	0	10,000
Total External	0	330,000	80,000	0	0	0	0	0	410,000
Total Project Expense	0	355,000	90,000	0	0	0	0	0	445,000
REVENUES									
Revenue Funding Source									
510-Stormwater Fund	0	355,000	90,000	0	0	0	0	0	445,000
Total Revenue Funding	0	355,000	90,000	0	0	0	0	0	445,000
Total Revenues	0	355,000	90,000	0	0	0	0	0	445,000

CAPITAL IMPROVEMENT PLAN - STORMWATER

94049 - Red Rock Creek Stabilization and Enhancement

Project Need: Red Rock Creek is experiencing severe erosion in the Tigard Triangle area. This has exposed the sanitary sewer line and caused line breaks in the past, for which temporary repairs were made. Eroded sediments have also settled in areas up and downstream of SW Dartmouth, causing degradation of wetlands and back-up of flows which at times contributes to creek overflow onto the sidewalk and street. Future development in the Tigard Triangle will add to stormwater runoff and contribute to the creek's problems.

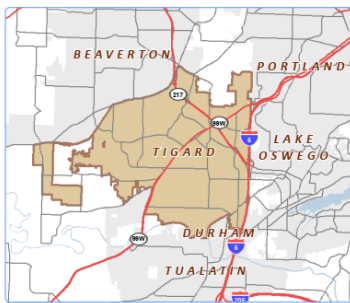
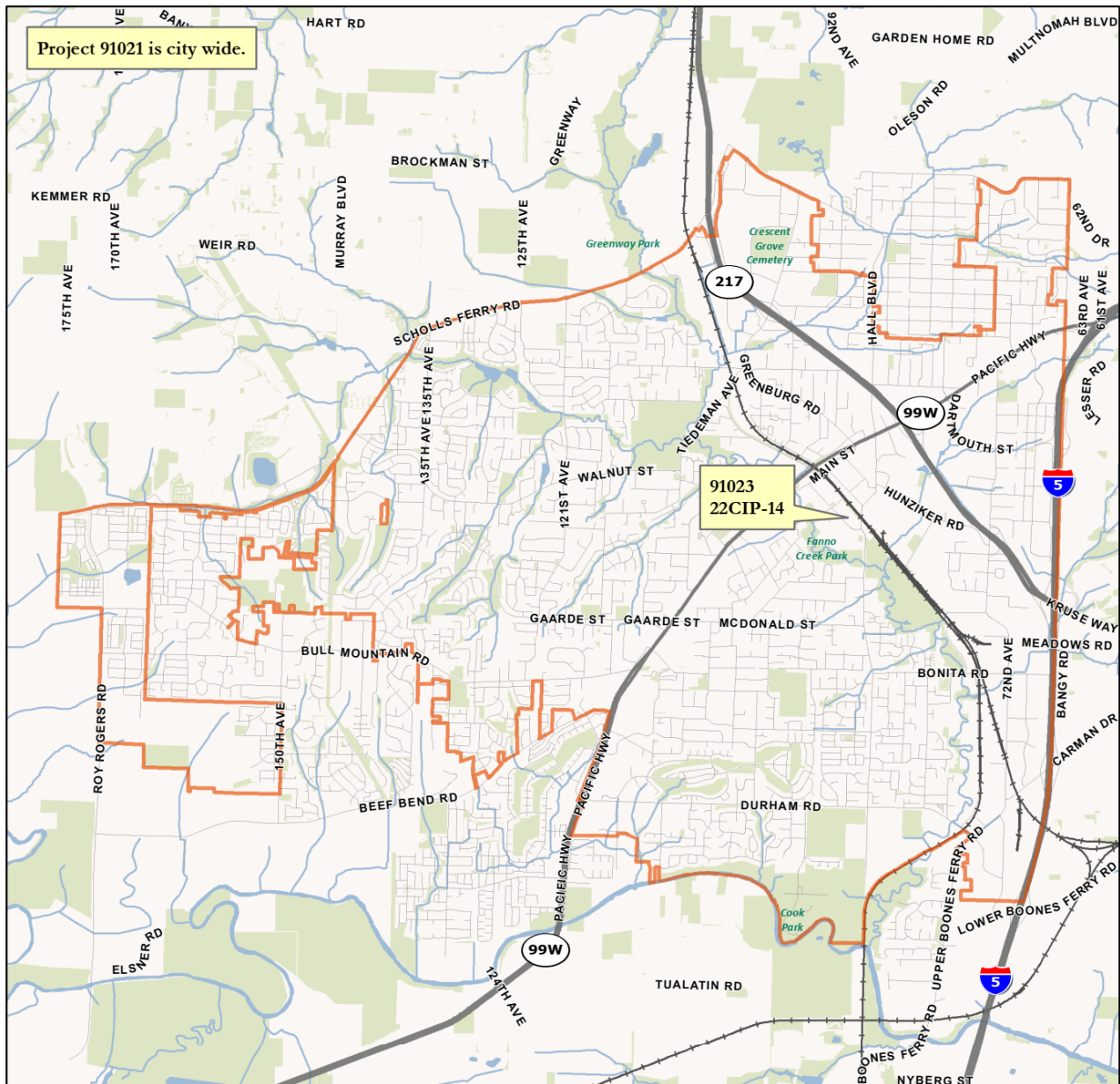
Project Description: Based on recommendations from the 2018 Stormwater Master Plan, and results of the Tigard Triangle Stormwater Implementation Plan (CIP #94044), this project is first priority to implement from a series of projects needed along the full length of Red Rock Creek in Tigard. The project will create a sustainable creek, floodplain, and vegetated corridor cross section that can withstand and contain current and future predicted storm flows while providing habitat and shading for native fish and other species. It will protect and re-bury exposed sanitary sewer lines. Excess sediment deposited in the vicinity of SW Dartmouth will be removed and the stream and wetlands restored to reduce flooding and improve stream function. Some piped creek sections will be day lighted. The new creek corridor cross section will be designed to also accommodate as possible a future Red Rock Creek Trail. The project will be designed to meet Clean Water Services standards such that new and re-development in the Tigard Triangle and Hunziker areas may be able to reduce onsite stormwater detention requirements and instead pay a fee to provide some future reimbursement toward this and other Red Rock Creek projects. This project represents multiple projects initially identified in the Stormwater Master Plan (projects 502, 506, and part of project 501 adjacent to SW Dartmouth).

Operations and Maintenance Impact: Will add significant vegetated green infrastructure for maintenance but will reduce sanitary sewer maintenance and repairs.

Total Project Cost: \$5,000,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	75,000	100,000	100,000	100,000	25,000	0	400,000
Total Internal	0	0	75,000	100,000	100,000	100,000	25,000	0	400,000
External Expenses									
Land/Right of Way Acquisition	0	0	100,000	100,000	0	0	0	0	200,000
Design and Engineering	0	0	250,000	250,000	125,000	125,000	0	0	750,000
Construction	0	0	0	250,000	1,500,000	1,250,000	0	0	3,000,000
Environmental Permit Compliance	0	0	50,000	50,000	0	0	50,000	0	150,000
Contingency	0	0	100,000	100,000	150,000	100,000	50,000	0	500,000
Total External	0	0	500,000	750,000	1,775,000	1,475,000	100,000	0	4,600,000
Total Project Expense	0	0	575,000	850,000	1,875,000	1,575,000	125,000	0	5,000,000
REVENUES									
Revenue Funding Source									
500-Sanitary Sewer Fund	0	0	207,000	306,000	675,000	360,000	0	0	1,548,000
510-Stormwater Fund	0	0	368,000	544,000	1,200,000	640,000	0	0	2,752,000
Total Revenue Funding	0	0	575,000	850,000	1,875,000	1,000,000	0	0	4,300,000
Other Revenue Source									
Urban Renewal Capital Improvement	0	0	0	0	0	575,000	125,000	0	700,000
Total Other Revenue	0	0	0	0	0	575,000	125,000	0	700,000
Total Revenues	0	0	575,000	850,000	1,875,000	1,575,000	125,000	0	5,000,000

CAPITAL IMPROVEMENT PLAN - FACILITIES



The City of Tigard Project Locations

 Tigard City Limits



0 0.5 1
Miles



City of Tigard Recommended Capital Improvement Plan FY 2022-27

CAPITAL IMPROVEMENT PLAN - FACILITIES

Project No.	Project Name	YTD 2021	2022	2023	2024	2025	2026	2027	Projected Total
22CIP-14	City Facilities Consolidation - Police/City Hall Phase	0	2,375,000	13,500,000	29,850,000	59,875,000	6,175,000	0	111,775,000
91021	Public Works Facility and Yard	250,000	30,173,270	23,209,160	0	0	0	0	53,632,430
91023	Public Works Field Staff Work Area and Breakroom	25,000	100,000	0	0	0	0	0	125,000
Total Funded		275,000	32,648,270	36,709,160	29,850,000	59,875,000	6,175,000	0	165,532,430

22CIP-14 - City Facilities Consolidation - Police/City Hall Phase

Tigard is growing and our city facilities are aging, undersized and need very expensive repairs and system replacements. The City Facilities Consolidation (CFC) project will build a seismically resilient complex on the existing site of the Public Works Operations building. When complete, the project will sell off the land where the existing City Hall and Police are located for development of housing units to help with the revitalization of Downtown Tigard. The proceeds will help pay for the project.

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	0	0	300,000	300,000	400,000	500,000	400,000	0	1,900,000
Total Internal	0	0	300,000	300,000	400,000	500,000	400,000	0	1,900,000
External Expenses									
Land/Right of Way Acquisition	0	0	100,000	4,520,000	0	0	0	0	4,620,000
Design and Engineering	0	0	1,660,000	7,150,000	1,150,000	900,000	75,000	0	10,935,000
Construction	0	0	0	170,000	23,600,000	44,375,000	3,850,000	0	71,995,000
Project Estimate	0	0	0	0	0	4,650,000	930,000	0	5,580,000
Contingency	0	0	315,000	1,360,000	4,700,000	9,450,000	920,000	0	16,745,000
Total External	0	0	2,075,000	13,200,000	29,450,000	59,375,000	5,775,000	0	109,875,000
Total Project Expense	0	0	2,375,000	13,500,000	29,850,000	59,875,000	6,175,000	0	111,775,000
REVENUES									
Other Revenue Source									
Full Faith and Credit	0	0	0	0	0	50,060,000	6,175,000	0	56,235,000
GO Bond	0	0	2,375,000	13,500,000	29,850,000	9,815,000	0	0	55,540,000
Total Other Revenue	0	0	2,375,000	13,500,000	29,850,000	59,875,000	6,175,000	0	111,775,000
Total Revenues	0	0	2,375,000	13,500,000	29,850,000	59,875,000	6,175,000	0	111,775,000

CAPITAL IMPROVEMENT PLAN - FACILITIES

91021 - Public Works Facility and Yard

Project Need: The current City of Tigard Public Works building, which initially housed the Tigard Water District, is 30 years old. Over the last several years, the city repurposed the PW yard and administrative offices, requiring the consolidation of those functions to the current PW building site. Starting in 2006 and continuing in more recent studies, there is a clearly defined need for a new Public Works Facility and Yard. The current offices are poorly ventilated and inadequately sized for the staff, resulting in the need to house some staff in leased space off-site. More meeting space is needed so that operations and maintenance staff do not have to conduct meetings outside. A storage warehouse is required to protect expensive tools, equipment, and parts and materials from the weather. A new fleet maintenance facility is needed to serve the PW construction equipment and the Police Departments' vehicles. A yard with a dewatering facility, adequate bulk storage, and city and employee vehicles is needed.

Project Description: This project will purchase the site, plan, permit, design, and ultimately construct a new Public Works Facility and Yard. It will house and serve as the operations and maintenance center for the water, sewer, storm, parks and recreation, streets, and fleet and facility functions. It will also function as the Incident Operation Center and host the field staff, equipment, and materials needed to respond to emergencies.

Operations and Maintenance Impact: The new yard and facilities will assist PW in operating and maintaining the ever-growing city and its infrastructure, tackle the backlog of maintenance work, and enhance our ability to provide core services.

Total Project Cost: \$53,653,930

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
Internal Expenses									
Project Management	4,500	0	350,000	350,000	0	0	0	0	704,500
Total Internal	4,500	0	350,000	350,000	0	0	0	0	704,500
External Expenses									
Land/Right of Way Acquisition	0	0	18,500,000	0	0	0	0	0	18,500,000
Design and Engineering	17,000	250,000	3,750,000	1,037,360	0	0	0	0	5,054,360
Construction	0	0	2,000,000	21,821,800	0	0	0	0	23,821,800
Contingency	0	0	5,573,270	0	0	0	0	0	5,573,270
Total External	17,000	250,000	29,823,270	22,859,160	0	0	0	0	52,949,430
Total Project Expense	21,500	250,000	30,173,270	23,209,160	0	0	0	0	53,653,930
REVENUES									
Revenue Funding Source									
400-Facilities Capital Projects Fund	21,500	0	0	0	0	0	0	0	21,500
530-Water Fund	0	250,000	7,250,000	0	0	0	0	0	7,500,000
Total Revenue Funding	21,500	250,000	7,250,000	0	0	0	0	0	7,521,500
Other Revenue Source									
Full Faith and Credit	0	0	18,473,270	23,209,160	0	0	0	0	41,682,430
GO Bond	0	0	4,450,000	0	0	0	0	0	4,450,000
Total Other Revenue	0	0	22,923,270	23,209,160	0	0	0	0	46,132,430
Total Revenues	21,500	250,000	30,173,270	23,209,160	0	0	0	0	53,653,930

CAPITAL IMPROVEMENT PLAN - FACILITIES

91023 - Public Works Field Staff Work Area and Breakroom

Project Need: With the Public Works yard and buildings and the Public Works annex's repurposing, the current Public Works building site continues to experience space limitations. Field crews regularly eat lunch and have offices in the vehicle bays during the dry summer months. When there is a need to shelter expensive equipment, there are not adequate facilities to relocate staff.

Project Description: This project will plan, design, and construct internal improvements to the existing Public Works building. It will add field staff workstations to the crew lunchroom, add additional office space to the front area, and take advantage of unused front counter space.

Operations and Maintenance Impact: Small increase to maintain the extra space.

Total Project Cost: \$125,000

	Actual through 2020	Projected 2021	2022	2023	2024	2025	2026	2027	Project Total
EXPENSES									
External Expenses									
Design and Engineering	0	25,000	0	0	0	0	0	0	25,000
Construction	0	0	100,000	0	0	0	0	0	100,000
Total External	0	25,000	100,000	0	0	0	0	0	125,000
Total Project Expense	0	25,000	100,000	0	0	0	0	0	125,000
REVENUES									
Revenue Funding Source									
270-Parks Utility Fund	0	7,500	30,000	0	0	0	0	0	37,500
500-Sanitary Sewer Fund	0	3,300	13,000	0	0	0	0	0	16,300
510-Stormwater Fund	0	5,700	23,000	0	0	0	0	0	28,700
530-Water Fund	0	8,500	34,000	0	0	0	0	0	42,500
Total Revenue Funding	0	25,000	100,000	0	0	0	0	0	125,000
Total Revenues	0	25,000	100,000	0	0	0	0	0	125,000